

Grade: K

Content Area: Mathematics

Introduction:

Students in Kindergarten math will complete five units that include naming numbers and counting up through 100, adding and subtracting with numbers from 1 through 20, comparing numbers and shapes, using place value, and naming and classifying two dimensional and three dimensional shapes. All math units follow the NJ Student Learning Objectives. Student progress will be measured in a variety of methods.

Original Adoption: October 23, 2018

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Revised on: July 1, 2019

Revised by: C. Sheplin

Recommended Pacing Guide	
Unit 1: Number Names and Count Sequences	30 Days
Unit 2: Addition as “adding to” and Subtraction as “taking from”	30 Days
Unit 3: Compare Numbers and Shapes	35 Days
Unit 4: Foundations for Place Value	25 Days
Unit 5: Geometric Shapes	25 Days

Unit 1: Number Names and Count Sequences	Duration: 30 Days
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Standards/Learning Targets

New Jersey Student Learning Standards:

- K.CC.A.1 Count to 100 by ones and by tens.
- K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
- K.CC.B.4 Count to tell the number of objects
 - 4.Understand the relationship between numbers and quantities; connect counting to cardinality.
 - a) when counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
 - b) Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
 - c) Understand that each successive number name refers to a quantity that is one larger.
- K.CC.B.5. Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

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Standards for Mathematical Practice:

- MP.2 Reason Abstractly and quantitatively.
- MP.4 Model with mathematics.
- MP.5 Use appropriate tools strategically.
- MP.6 Attend to precision.

Interdisciplinary Connections:

Reading:

- **RL.K.4** Ask and answer questions about unknown words in a text.
- **RF K.4** Read emergent text with one-to-one correspondence to develop fluency and comprehension skills.

Speaking and Listening:

- **SLK.1** Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.

Writing:

- **W.K.5** With guidance and support from adults, strengthen writing through response and self-reflection using questions and suggestions from peers (e.g., adding details).

Technology Standards:

- 8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
- A. Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations
 - 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.
 - 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
 - B. Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
 - 8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product
 - D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
 - 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
 - 8.2.2.E.1 List and demonstrate the steps to an everyday task
 - F: Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

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21st Century Themes/Career Readiness:

- CRP2. Apply appropriate academic and technical skills
- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them

21st Century Life and Career Standards:

9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community

Evidence of Student Learning

Formative Tasks:

- Solve and Share
- Quick Check quizzes
- Daily Review
- Manipulative Self-Check
- Cooperative group learning
- Exit slips
- Analysis of student work
- Teacher observations/anecdotal/checklists
- Self-reflection
- Math journals

Alternative Assessments:

- Performance Tasks
- Student created models
- Written/verbal explanations
- Math Portfolio
- Peer assessment
- Self-assessment

Summative Assessments:

- Topic tests
- Extension Projects
- STEAM Projects
- Topic Performance Assessment

Benchmark Assessments:

- Pearson cumulative benchmark assessment
- Beginning of the year, mid year, and end of the year tests

Knowledge & Skills

Enduring Understandings:

- Know number names and the count sequence.
- Count to tell the number of objects.
- Know that adding an object is counting one more
- Know that taking away an object is counting one less
- Understand addition as putting together and adding to, and

Essential Questions:

- How do you count to 10 by ones?
- How can you represent a number of objects by the correct numeral up to 5 using zero to represent no objects?
- What is the ascending number name for each object in a group?
- What are the objects named in the standard order, identify the last

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<p>understand subtraction as taking apart and taking from.</p>	<p>number called as the number of counted objects in the set, regardless of the order they are counted?</p> <ul style="list-style-type: none"> ● Why is the next number name in counting always one greater than the previous number? ● How do you know how many are in a group of objects when up to 10 are arranged in a line or up to 5 are in a scattered configuration? ● What can we do to create addition and subtraction events with objects (or make drawings) to represent a sum (putting together) or a difference (taking from) up to 10?
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Core Instructional & Supplemental Materials

<p>Suggested Activities/Resources:</p> <ul style="list-style-type: none"> ● Pearson Envision 2.0 ● Happy Numbers ● http://www.abcya.com/kindergarten_computers.htm#numbers-cat ● Better Lessons ● math center with open ended collections manipulatives ● Number bingo ● Subitize match game ● Blast Off Counting Game ● Smarty Ants ● ST Math 	<p>Varied Levels of Text:</p> <p><i>Shape Up!</i> By David A. Adler <i>The Greedy Triangle</i>, Marilyn Burns <i>Springtime Addition</i>, Jill Fuller <i>Toy Box Subtraction</i>, Jill Fuller <i>How Many Legs In All?</i> Diorio, Anne D <i>Little Number Stories</i> Williams, Rozanne L. G <i>Monster Musical Chairs</i> Murphy, Stuart J. <i>Picnic Fun: Hot Dog Operations</i> Loughran, Donna N <i>NEW Take Away</i> Trumbauer, Lisa E <i>Blue Sea</i> Kalan, Robert A</p>
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Modifications and Accommodations

<p>English Language Learners:</p> <ul style="list-style-type: none"> ● Simplify written and verbal instructions ● Provide written directions with models and diagrams when possible ● Build in more group work to allow ELL students to interact and communicate with peers

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- Provide vocabulary ahead of time
- Use sentence frames to give students practice with academic language
- Pre-teach as often as possible- share videos, articles, vocabulary etc. with ELL students prior to use in class
- Utilize visual charts/cues
- Highlight key words
- Provide manipulatives
- Frequently check for understanding

Special Education/504 Plans/Students with Disabilities:

- Follow specific students accommodations and modifications as listed in individual student IEP or 504 plan
- Allow extra time
- Test key concepts and main ideas
- Simplify instructions
- Give students objective tests: matching, multiple choice, etc.
- Provide manipulatives
- Use alternative assessments such as physical demonstration and pictorial products
- Provide shorter assessments
- Grade content vs. mechanics
- Read assessments aloud
- Allow open-book or open-note tests

Students at Risk of Failure:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control

Economically Disadvantaged:

- Provide clear, achievable expectation, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

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Culturally Diverse:

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

Unit 2: Addition as “adding to” and Subtraction as “taking from”	Duration: 30 Days
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Standards/Learning Targets

New Jersey Student Learning Standards:

- K.OA.A.1. Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations
- K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- K.OA.A.5 Fluently add and subtract within
- K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
- K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.3

Standards for Mathematical Practice:

- MP.1 Make sense of problems and persevere in solving them.
- MP.2 Reason Abstractly and quantitatively.
- MP. 4 Model with mathematics..
- MP.6 Attend to precision.

Interdisciplinary Connections:

Reading:

- **RL.K.4** Ask and answer questions about unknown words in a text.
- **RF K.4** Read emergent text with one-to-one correspondence to develop fluency and comprehension skills.

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Speaking and Listening:

- **SLK.1** Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.

Writing:

- **W.K.5** With guidance and support from adults, strengthen writing through response and self-reflection using questions and suggestions from peers (e.g., adding details).

Technology Standards:

- **A. Technology Operations and Concepts:** Students demonstrate a sound understanding of technology concepts, systems and operations
 - 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.
 - 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
- **C. Communication and Collaboration:** Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
 - 8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product
 - 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
 - 8.2.2.E.1 List and demonstrate the steps to an everyday task
- **F: Critical thinking, problem solving, and decision making:** Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

21st Century Themes/Career Readiness:

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them
- CRP11. Use technology to enhance productivity.

21st Century Life and Career Standards:

9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community

Evidence of Student Learning

Formative Tasks:

- Solve and Share
- Quick Check quizzes
- Daily Review
- Cooperative group learning
- Exit slips
- Analysis of student work

Alternative Assessments:

- Performance Tasks
- Student created models
- Written/verbal explanations
- Peer assessment
- Self-assessment

Long Beach Island Consolidated School District

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<ul style="list-style-type: none"> • Teacher observations/anecdotal/checklists • Self-reflection • Math journals 	
Summative Assessments: <ul style="list-style-type: none"> • Topic tests • Extension Projects • Addition and Subtraction Quick Checks • Topic Performance Assessment 	Benchmark Assessments: <ul style="list-style-type: none"> • Pearson cumulative benchmark assessment • Beginning of the year, mid year, and end of the year
Knowledge & Skills	
Enduring Understandings: <ul style="list-style-type: none"> • Know number names and the count sequence. • Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. • Classify objects and count the number of objects in each category. • Add one object to a group and understand that the amount of objects now has one more in quantity • Take one object away from a group and understand that the amount of objects is now one less in quantity 	Essential Questions: <ul style="list-style-type: none"> • How do you count and represent with a written numeral a number of objects to 10? • What strokes do we make to write numerals from zero to 10? • What number do you begin counting from when we count to 30 by ones and tens? • What numbers come next when we begin counting from any given number up to 50 -- instead of having to begin at one? • What objects or drawings can we use to represent and solve addition and subtraction word problems (within 10)? • What tools can we use to master adding fluently within 5? • What do we need to look for to classify and sort objects into given categories and count the objects in each category (up to 10 objects)?
Core Instructional & Supplemental Materials	
Suggested Activities/Resources: <ul style="list-style-type: none"> • Pearson Envision 2.0 • Happy Numbers • Better Lessons 	Varied Levels of Text: Literature <i>Shape Up!</i> By David A. Adler <i>The Greedy Triangle</i> , Marilyn Burns

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<ul style="list-style-type: none"> ● https://jr.brainpop.com/math/ ● math center with open ended collections manipulatives ● Domino Addition and Subtraction ● Addition War ● Smarty Ants ● ST Math 	<p><i>Springtime Addition</i>, Jill Fuller <i>Toy Box Subtraction</i>, Jill Fuller <i>How Many Legs In All?</i> Diorio, Anne D <i>Little Number Stories</i> Williams, Rozanne L. G <i>Monster Musical Chairs</i> Murphy, Stuart J. <i>Picnic Fun: Hot Dog Operations</i> Loughran, Donna N <i>NEW Take Away</i> Trumbauer, Lisa E <i>Blue Sea</i> Kalan, Robert A</p>
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Modifications and Accommodations

English Language Learners:

- Simplify written and verbal instructions
- Provide written directions with models and diagrams when possible
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- Utilize visual charts/cues
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Special Education/504 Plans/Students with Disabilities:

- Follow specific students accommodations and modifications as listed in individual student IEP or 504 plan
- Allow extra time
- Test key concepts and main ideas
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Students at Risk of Failure:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences

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- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control

Economically Disadvantaged:

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Culturally Diverse:

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- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
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- Allow for alternative assignments
- Provide visuals
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Unit 3: Compare Numbers and Shapes	Duration: 35 Days
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Standards/Learning Targets

New Jersey Student Learning Standards:

- K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of strategies
- K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.
- K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see

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which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

- K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).

Standards for Mathematical Practice:

- MP.1 Make sense of problems and persevere in solving them.
- MP.2 Reason Abstractly and quantitatively.
- MP.3 Construct viable arguments and critique the reasoning of others.
- MP.7 Look for and make use of structure.

Interdisciplinary Connections:

Reading:

- **RL.K.4** Ask and answer questions about unknown words in a text.
- **RF K.4** Read emergent text with one-to-one correspondence to develop fluency and comprehension skills.

Speaking and Listening:

- **SLK.1** Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.

Writing:

- **W.K.5** With guidance and support from adults, strengthen writing through response and self-reflection using questions and suggestions from peers (e.g., adding details).

Technology Standards:

- 8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
 - 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.
 - 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).
- C. Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
 - 8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product
 - 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
 - 8.2.2.E.2 List and demonstrate the steps to an everyday task
- F: Critical thinking, problem solving, and decision making: Students use critical

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thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- 21st Century Themes/Career Readiness:**
- CRP2. Apply appropriate academic and technical skills.
 - CRP4. Communicate clearly and effectively and with reason.
 - CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
 - CRP11. Use technology to enhance productivity.
- 21st Century Life and Career Standards:**
- 9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community

Evidence of Student Learning

<p>Formative Tasks:</p> <ul style="list-style-type: none"> ● Solve and Share ● Quick Check quizzes ● Daily Review ● Cooperative group learning ● Small group participation ● Exit slips ● Analysis of student work ● Teacher observations/anecdotal/checklists ● Self-reflection ● Math journals 	<p>Alternative Assessments:</p> <ul style="list-style-type: none"> ● Performance Tasks ● Student created models ● Written/verbal explanations ● Peer assessment ● Self-assessment
<p>Summative Assessments:</p> <ul style="list-style-type: none"> ● Topic tests ● Extension Projects ● STEAM Projects ● Topic Performance Assessment 	<p>Benchmark Assessments:</p> <ul style="list-style-type: none"> ● Pearson cumulative benchmark assessment ● Beginning of the year, mid year, and end of the year SGO

Knowledge & Skills

<p>Enduring Understandings:</p> <ul style="list-style-type: none"> ● Know number names and the count sequence. ● Compare numbers. ● Name shapes using geometric names 	<p>Essential Questions:</p> <ul style="list-style-type: none"> ● Where do you begin when counting objects to 20 and how can you write a numeral to show how many? ● Where do you place your pencil on the paper when you write the
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<ul style="list-style-type: none"> ● Describe and compare measurable attributes. ● Analyze, compare, create, and compose shapes. 	<p>numerals zero to 20?</p> <ul style="list-style-type: none"> ● What number do you start with when counting to 30 by ones and tens? ● What do you need to do to identify if the number of objects in one group is greater than, less than, or equal to the number of objects in another group. (groups of up to 10 objects)? ● What can you use to help you compare numbers up to 10, written as numerals? ● What do you think about when you describe measurable attributes of objects?(e.g., length and weight.) ● What do you do when you directly compare and describe two objects with a measurable attribute in common using “more of”/”less of” the attribute? For example, directly compare the heights of two children and describe one child as taller/shorter. ● What do you look at when you analyze and compare two- and three-dimensional shapes in different sizes and orientations by counting sides or vertices (“corners”) or
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Core Instructional & Supplemental Materials

<p>Suggested Activities/Resources:</p> <ul style="list-style-type: none"> ● Pearson Envision 2.0 2016 ● Happy Numbers ● https://www.education.com/game/thin-king-of-a-number/ ● http://www.abcya.com/shapes_geome-try_game.htm ● Better Lessons ● Pattern Block Pictures ● Grab and compare ● Smarty Ants ● ST Math 	<p>Varied Levels of Text:</p> <p>Literature</p> <p><i>Shape Up!</i> By David A. Adler: <i>The Greedy Triangle</i>, Marilyn Burns <i>Springtime Addition</i>, Jill Fuller: <i>Toy Box Subtraction</i>, Jill Fuller: <i>How Many Legs In All?</i> Diorio, Anne D <i>Little Number Stories</i> Williams, Rozanne L. G <i>Monster Musical Chairs</i> Murphy, Stuart J. <i>Picnic Fun: Hot Dog Operations</i> Loughran, Donna N <i>NEW Take Away</i> Trumbauer, Lisa E <i>Blue Sea Kalan</i>, Robert A</p>
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Modifications and Accommodations

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Special Education/504 Plans/Students with Disabilities:

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Students at Risk of Failure:

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- Give choice to provide a sense of control

Economically Disadvantaged:

- Provide clear, achievable expectation, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere

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- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Culturally Diverse:

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary
- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

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Unit 4: Foundations for Place Value	Duration: 25 Days
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Standards/Learning Targets

New Jersey Student Learning Standards:

- K.NBT.A Work with numbers 11–19 to gain foundations for place value.
- K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones
- K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).
- K.OA.A.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

Standards for Mathematical Practice:

- MP.2 Reason Abstractly and quantitatively.
- MP.3 Construct viable arguments and critique the reasoning of others.
- MP.5 Use appropriate tools strategically.
- MP.7 Look for and make use of structure.
- MP.8 Look for and express regularity in repeated reasoning.

Interdisciplinary Connections:

Reading:

- **RL.K.4** Ask and answer questions about unknown words in a text.
- **RF K.4** Read emergent text with one-to-one correspondence to develop fluency and comprehension skills.

Speaking and Listening:

- **SLK.1** Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.

Writing:

- **W.K.5** With guidance and support from adults, strengthen writing through response and self-reflection using questions and suggestions from peers (e.g., adding details).

Technology Standards:

- 8.1 Educational Technology: All students will use digital tools to access, manage,

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<p>evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <ul style="list-style-type: none"> ○ 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose. ○ 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums). ● B. Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology. ● C. Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. <ul style="list-style-type: none"> ○ 8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product ● D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. <ul style="list-style-type: none"> ○ 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue. ○ 8.2.2.E.2 List and demonstrate the steps to an everyday task

<p>21st Century Themes/Career Readiness:</p> <ul style="list-style-type: none"> ● CRP1. Act as a responsible and contributing citizen and employee. ● CRP2. Apply appropriate academic and technical skills. ● CRP9. Model integrity, ethical leadership and effective management. ● CRP12. Work productively in teams while using cultural global competence. <p>21st Century Life and Career Standards:</p> <p>9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community</p>

Evidence of Student Learning

<p>Formative Tasks:</p> <ul style="list-style-type: none"> ● Solve and Share ● Quick Check quizzes ● Daily Review ● Cooperative group learning ● Exit slips ● Analysis of student work ● Teacher observations/anecdotal/checklists ● Self-reflection ● Place Value Bundle Activity ● Ten Frame Quiz ● Math journals 	<p>Alternative Assessments:</p> <ul style="list-style-type: none"> ● Performance Tasks ● Student created models ● Written/verbal explanations ● Peer assessment ● Self-assessment
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Summative Assessments: <ul style="list-style-type: none"> ● Topic tests ● Extension Projects ● Topic Performance Assessment 	Benchmark Assessments: <ul style="list-style-type: none"> ● Pearson cumulative benchmark assessment ● Beginning of the year, mid year, and end of the year SGO
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Knowledge & Skills

Enduring Understandings: <ul style="list-style-type: none"> ● Numbers can be represented in a variety of ways ● Numbers greater than 9 (11-19) are grouped into a ten and one(s) 	Essential Questions: <ul style="list-style-type: none"> ● How can you represent the number 11? 12? 13? 14? 15? 16? 17? 18? 19? ● Why do we group numbers into tens and ones?
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Core Instructional & Supplemental Materials
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Suggested Activities/Resources: <ul style="list-style-type: none"> ● Pearson Envision 2.0: 2016 ● Happy Numbers ● http://www.abcya.com/kindergarten_computers.htm#numbers-cat ● Better Lessons ● Hands on centers ● Brainpopjr.com ● 10 and some more floor ten frame ● Pom pom ten frame egg cartons ● Smarty Ants ● ST Math 	Varied Levels of Text: <i>Shape Up!</i> By David A. Adler: <i>The Greedy Triangle</i> , Marilyn Burns <i>Springtime Addition</i> , Jill Fuller: <i>Toy Box Subtraction</i> , Jill Fuller: <i>How Many Legs In All?</i> Diorio, Anne D <i>Little Number Stories</i> Williams, Rozanne L. G <i>Monster Musical Chairs</i> Murphy, Stuart J. <i>Picnic Fun: Hot Dog Operations</i> Loughran, Donna N <i>NEW Take Away</i> Trumbauer, Lisa E <i>Blue Sea Kalan</i> , Robert A
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Modifications and Accommodations

English Language Learners: <ul style="list-style-type: none"> ● Simplify written and verbal instructions ● Provide written directions with models and diagrams when possible ● Build in more group work to allow ELL students to interact and communicate with peers ● Provide vocabulary ahead of time ● Use sentence frames to give students practice with academic language ● Pre-teach as often as possible- share videos, articles, vocabulary etc. with ELL students prior to use in class ● Utilize visual charts/cues

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- Highlight key words
- Provide manipulatives
- Frequently check for understanding

Special Education/504 Plans/Students with Disabilities:

- Follow specific students accommodations and modifications as listed in individual student IEP or 504 plan
- Allow extra time
- Test key concepts and main ideas
- Simplify instructions
- Give students objective tests: matching, multiple choice, etc.
- Provide manipulatives
- Use alternative assessments such as physical demonstration and pictorial products
- Provide shorter assessments
- Grade content vs. mechanics
- Read assessments aloud
- Allow open-book or open-note tests

Students at Risk of Failure:

- Ensure child has access to all appropriate academic resources both in school and at home
- Provide structure and adhere to a consistent daily routine with clear and concise rules
- Facilitate successful experiences
- Provide tutoring if needed
- Allow students to complete assignments in school
- Do not penalize for late or missing assignments/materials
- Offer encouragement and understanding
- Allow students to have personal possessions and property in school
- Give choice to provide a sense of control

Economically Disadvantaged:

- Provide clear, achievable expectation, do not lower academic requirements for them.
- Build a safe and nurturing atmosphere
- Be flexible with assignments
- Offer several alternatives from which all students can choose.
- Allow students to finish assignments independently, or give them the opportunity to complete tasks at their own pace.
- Use real-world examples and create mental models for abstract idea
- Provide increased knowledge base and vocabulary use about real world experiences.
- Share the decision making in class.
- Maintain expectations while offering choice and soliciting input

Culturally Diverse:

- Involve families in student learning
- Provide social/emotional support
- Respect cultural traditions
- Show photos, videos, and definitions when possible for culturally unique vocabulary

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- Provided students with necessary academic resources and materials
- Allow for alternative assignments
- Provide visuals
- Support verbal explanations with non verbal cues: Gestures/ facial expressions Props, realia, manipulatives, concrete materials Visuals, graphs, pictures, maps

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Unit 5: Geometric Shapes	Duration: 25 Days
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Standards/Learning Targets

New Jersey Student Learning Standards:

- K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- K.G.A.2 Correctly name shapes regardless of their orientations or overall size.
- K.G.A.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).
- K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- K.G.B.6 Compose simple shapes to form larger shapes *For example, “Can you join these two triangles with full sides touching to make a rectangle?”*

Standards for Mathematical Practice:

- MP.2 Reason Abstractly and quantitatively.
- MP.3 Construct viable arguments and critique the reasoning of others.
- MP.4 Model with mathematics.
- MP.5 Use appropriate tools strategically.
- MP.7 Look for and make use of structure.

Interdisciplinary Connections:

Reading:

- **RL.K.4** Ask and answer questions about unknown words in a text.
- **RF K.4** Read emergent text with one-to-one correspondence to develop fluency and comprehension skills.

Speaking and Listening:

- **SLK.1** Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.

Writing:

- **W.K.5** With guidance and support from adults, strengthen writing through response and self-reflection using questions and suggestions from peers (e.g., adding details).

Technology Standards:

- 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.
- 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual

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- environments (i.e. games, museums).
- B. Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
 - C. Communication and Collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
 - 8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product
 - D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
 - 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
 - 8.2.2.E.2 List and demonstrate the steps to an everyday task

21st Century Themes/Career Readiness:

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP9. Model integrity, ethical leadership and effective management.
- CRP12. Work productively in teams while using cultural global competence.

21st Century Life and Career Standards:

9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community

Evidence of Student Learning

Formative Tasks:

- Solve and Share
- Quick Check quizzes
- Daily Review
- Cooperative group learning
- Exit slips
- Analysis of student work
- Teacher
- Shape Creation Task
- Role, Slide, Stack Activity
- observations/anecdotal/checklists
- Self-reflection
- Math journals

Alternative Assessments:

- Performance Tasks
- Student created models
- Written/verbal explanations
- Peer assessment
- Self-assessment

Summative Assessments:

- Topic tests
- Extension Projects
- Topic Performance Assessment

Benchmark Assessments:

- Pearson cumulative benchmark assessment
- Beginning of the year, mid year, and end of the year SGO

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Knowledge & Skills

<p>Enduring Understandings:</p> <ul style="list-style-type: none"> ● Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). ● Analyze, compare, create, and compose shapes. ● Know number names and the count sequence. ● Compose 2D shapes and 3D figures ● Compare different 2D shapes by number of sides, number of vertices, and size of sides ● Compare 3D figures by number of sides, number of vertices, number of edges, and number of faces 	<p>Essential Questions:</p> <ul style="list-style-type: none"> ● What do we do to describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to? ● What characteristics help us name shapes regardless of their orientations or overall size? ● What will help you to identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”)? ● Can we create shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes? ● What simple shapes can we use to form larger shapes? <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i> ● What number do we start on when we count to 100 by ones and by tens?
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Core Instructional & Supplemental Materials

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