










**Grade K Mathematics**  
**Unit 2: Count, Write and Represent Numbers Through 5**

Updated August 2024

Trimester	Unit Title	Recommended Instructional Days
1	Count, Write and Represent Numbers Through 5	8 - 10 days
<b>Domain: Counting and Cardinality &amp; Operations and Algebraic Thinking</b>		
<p><i>Strand:</i></p> <p> <b>K.CC.B.4</b> Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>c. Understand that each successive number name refers to a quantity that is one larger.</li> </ol> <p> <b>K.CC.B.5</b> 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.</p> <p> <b>K.CC.A.3</b> 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).</p> <p> <b>K.OA.A.3</b> 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., <math>5 = 2+3</math> and <math>5 = 4 + 1</math>)</p> <p> <b>K.CC.A.1</b> Count to 100 by ones and tens.</p> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <b>Major Cluster</b></div> <div style="text-align: center;"> <b>Supporting Cluster</b></div> <div style="text-align: center;"> <b>Additional Cluster</b></div> <div style="text-align: center;"> <b>Climate Change Opportunity</b></div> </div>		
<p><b>Progress Indicator:</b> ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊ Summative Assessments ◊ Performance Based Assessments</p>		

**Mathematical Practices:**

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reason of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

**Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLs-CLKS within Unit**

**Essential Questions:**

Lesson 1: How can you show and count up to 5 objects?

Lesson 2: How can you count and write up to 5 with numbers?

Lesson 3: How can you use two sets of objects to show 5 in more than one way?

Lesson 4: Delete - not in line with NJSLs Grade K.

Lesson 5: Delete - more in line with Chapter 20.

Lesson 6: How can you count forward up to 5? (Focus on counting forward. Students are not required to count backward, can use for G&T)

Lesson 7: What is zero? (Delete Go Math lesson and add Engage NY lesson, found under Suggested Activity)

Lesson 8: How can you show zero?

**Essential Understandings:**

1. Model and count up to 5 with objects

2. Represent up to 5 objects with a written numeral.

3. Use objects or drawings to decompose 5 into pairs in more than one way.

4. Delete - not in line with NJSLs Grade K

5: Delete - more in line with Chapter 20.

6. Count forward within 5. (Focus on counting forward. Students are not required to count backward, can use for G&T)

7. Solve problems by using the strategy make a model. (Delete Go Math lesson and add Engage NY lesson, found under Suggested Activity)

8. Represent 0 objects with a written numeral.

**Vocabulary:**

- five
- pair
- and

- forward
- backward
- fewer
- more
- zero

**Suggested Activity Description:**

Playful engagement, Active Child, Daily calendar routine, Whole group mini-lesson, Small group explorations, Waggle, On the Spot Videos, Tier 2 and 3 Intervention Resources, Vocabulary Activities, Grab and Go Differentiation Kit, Explore and Guided/Independent Practice related to the NJSL, Essential Question Discussion and Check-In, Share and Show, Basic Skills Review, Manipulative Activity, Reteach Activity, Reading Strategies Activity, Making Connections, Multilingual Support, Performance Task, Enrich Activity, Exit Ticket

**Lesson 7:** Delete Go Math lesson and replace with the Engage NY lesson about the meaning of and write the numeral 0: [EngageNY, Module 1, Lesson 12](#) Additional activity: [Montessori Primary Guide, Concept of Zero](#))

- K.CC.A.3 requires students to represent a count of no objects and students are working with the concept of zero in this lesson. However, the situation types are beyond those that kindergartners are responsible for.

**Interdisciplinary Connections:**

**Science:**

**(Lesson 2.2)**

Materials: Paper bags, objects with different textures

1. Talk about the five senses with children. Tell them we have five senses—sight, hearing, smell, taste, and touch.
2. Invite children to explore their sense of touch. Gather objects that are soft, smooth, rough, bumpy, or of different textures. Place them in bags and give children the opportunity to investigate with their hands.
3. Ask children how many fingers they have on the hand that they used to feel the objects in the bag. Have children hold up one hand and say five.

**Social Studies:**

**(Lesson 2.2)**

Materials: Calendar

1. Look at the days in a school week on the calendar, pointing to each day—Monday through Friday—as you say its name.
2. Have children count the number of days they come to school in one week.

**Language Arts:**

1. Pancakes For All - (From the Differentiated Centers Kits Grab and Go)
2. The Red Caboose - (From the Differentiated Centers Kits Grab and Go)
3. Mabel's Place - (From the Differentiated Centers Kits Grab and Go)

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<b>Spot Light On:</b> Define "include" with examples.			
<b>Social and Emotional Learning: Competencies</b>		<b>Social and Emotional Learning: Sub-Competencies</b>	
SEL Competencies: <ul style="list-style-type: none"> <li>• Self- awareness</li> <li>• Social Awareness</li> <li>• Self- Management</li> <li>• Relationship Skills</li> <li>• Responsible Decision-Making</li> </ul>		<ul style="list-style-type: none"> <li>• Recognizing the importance of self-confidence in handling daily tasks and challenges.</li> <li>• Demonstrate an awareness of the expectations for social interactions in a variety of ways.</li> <li>• Demonstrate an understanding of the need for mutual respect when viewpoints differ.</li> <li>• Identify and apply ways to persevere through alternative methods to achieve goals.</li> <li>• Utilize positive communication and social skills to interact effectively with others.</li> <li>• Develop, implement, and model effective problem solving and critical thinking skills.</li> </ul>	
<b>Assessments (Formative)</b> <i>To show evidence of meeting the standard/s, students will successfully engage within:</i>		<b>Assessments (Summative)</b> <i>To show evidence of meeting the standard/s, students will successfully complete:</i>	
<b>Formative Assessments:</b> • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments		<b>Benchmarks &amp; Summative Assessments:</b> Chapter/Unit Assessments • Standardized Tests • Project-based Assessments	
<b>Differentiated Student Access to Content: Teaching and Learning <u>Resources/Materials</u></b>			
<b>Core Resources</b>	<b>Alternate Core Resources IEP/504/At-Risk/ESL</b>	<b>ELL Core Resources</b>	<b>Gifted &amp; Talented Core Resources</b>
Go Math Workbook, Interactive Student Edition, ST MATH 60 minutes a week, Waggle, Math on the Spot Videos, iReady, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax,	Reteaching worksheets, Skill building workbook, Math manipulatives, iTools, Leveled practice worksheets	Multilingual glossary, eGlossary, Multilingual Activities on ED, Vocabulary Cards, Success for English Learners worksheets, Leveled Strategies for English Learners, Linguistic Support	ST MATH special projects, Enrichment worksheets, Art of Problem Solving, Leveled assessments

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Achieve the Core, Desmos, RTI			
<b>Supplemental Resources</b>			
<p><b>Technology:</b>          • Chromebooks • Online math manipulatives</p> <p><b>Other:</b>          • Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives</p>			
<b>Differentiated Student Access to Content:          Recommended <i>Strategies &amp; Techniques</i></b>			
<b>Core Resources</b>	<b>Alternate Core Resources <i>IEP/504/At-Risk/ESL</i></b>	<b>ELL Core Resources</b>	<b>Gifted &amp; Talented Core</b>
Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat	Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake test for additional credit, provide additional times and preferential seating as needed, review, restate and repeat directions, provide study guides, and/or break assignments into segments of shorter tasks.	Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of an online bilingual dictionary, and modified assessment and/or rubric.	Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect student to related
<b>NJSLS CAREER          READINESS, LIFE</b>	<b>Disciplinary Concept(s):</b> Critical Thinking and Problem Solving		
	<b>Core Ideas:</b>	Critical thinkers must first identify a problem then develop a plan to address it in order to effectively solve a problem.	

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<b>LITERACIES &amp; KEY SKILLS</b>	<i>Performance Expectation/s:</i>	<ul style="list-style-type: none"> <li>• <b>9.4.2.CT.2:</b> Identify possible approaches and resources to execute a plan.</li> <li>• <b>9.4.2.CT.3:</b> Use a variety of types of thinking to solve problems (e.g., inductive, deductive).</li> </ul>
	<b>Career Readiness, Life Literacies, &amp; Key Skills Practices</b>	
	<p>Act as a responsible and contributing community member and employee.  Attend to financial well-being.  Consider the environmental, social and economic impacts of decisions.  Demonstrate creativity and innovation.  Utilize critical thinking to make sense of problems and persevere in solving them.  Model integrity, ethical leadership and effective management.  Plan education and career paths aligned to personal goals.  Use technology to enhance productivity, increase collaboration and communicate effectively.  Work productively in teams while using cultural/global competence.</p>	

New Jersey Legislative Statutes and Administrative Code  
(place an "X" before each law/statute if/when present within the curriculum map)

Amistad Law: <i>N.J.S.A. 18A 52:16A-88</i>		Holocaust Law: <i>N.J.S.A. 18A:35-28</i>		LGBT and Disabilities Law: <i>N.J.S.A. 18A:35-4.35</i>	<b>X</b>	Diversity & Inclusion: <i>N.J.S.A. 18A:35-4.36a</i>	Standards in Action: <i>Climate Change</i>
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