










**Grade K Mathematics**  
**Unit 7: Count and Represent Numbers Through 8**

Updated August 2024

Trimester	Unit Title	Recommended Instructional Days
1	Count and Represent Numbers Through 8	8 - 10 days
<b>Domain: Counting and Cardinality &amp; Operations and Algebraic Thinking</b>		
<p><i>Strand:</i></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.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.OA.A.1</b> Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations.</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> <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 count out 6 objects?  
Lesson 2: How can you represent up to 6 objects with a written numeral?  
Lesson 3: How can you count out 7 objects?  
Lesson 4: How can you represent up to 7 objects with a written numeral?  
Lesson 5: How can you count out 8 objects?  
Lesson 6: How can you represent up to 8 objects with a written numeral?

**Essential Understandings:**

1. Model and count 6 with objects.
2. Represent up to 6 objects with a written numeral.
3. Model and count 7 with objects.
4. Represent up to 7 objects with a written numeral.
5. Model and count 8 with objects.
6. Represent up to 8 objects with a written numeral.

**Vocabulary:**

- six
- seven
- eight

**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

NJSLS, 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

**Interdisciplinary Connections:**

**Science:**

**(Lesson 7.3)**

Materials: Countable objects from nature, index cards, crayons

1. Tell children that together with a partner they will collect objects from nature. Take pairs of children on a walk to collect things from nature to show sets of 7.
2. Children might collect pebbles, pinecones, acorns, and leaves. Have children group their collections in sets of seven and write 7 on index cards to label each group.

**(Lesson 7.5)**

Materials: Crayons or markers

1. Tell children that there are many kinds of spiders in the world. All spiders have eight legs and up to eight eyes. The eight legs are attached in pairs to the body.
2. Some spiders spin webs of silk. Many small spiders travel with the wind by making a long thread of silk.
3. Have children draw a spider, count to be sure they have made eight legs, and record an 8 near the spider.

**Social Studies:**

**(Lesson 7.3)**

Materials: Calendar

1. Review the days of the week with children, pointing to each day on the calendar as you say the name.
2. Have children count the number of days in one week. • Ask children questions such as the following. How many days are there in a week? How many Mondays are there in a week?

**(Lesson 7.5)**

Materials: Calendar, crayons or markers

1. Show children the calendar page for October. Tell them that October is a fall month. Discuss events that might happen in October.
2. Explain that octo, the first part of the name of October, means “eight,” and tell children that long ago in ancient Rome, October was the eighth month of the year.
3. Have children draw eight things that they might find or do in October.

**Language Arts:**

1. 2, 4, 6, 8, Legs - (From the Differentiated Centers Kits Grab and Go)

**Spot Light On:** Group work/stations where classmates are included.

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Social and Emotional Learning: <i>Competencies</i>		Social and Emotional Learning: <i>Sub-Competencies</i>	
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:</b> <b>Teaching and Learning <i>Resources/Materials</i></b>			
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core Resources
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, Achieve the Core, Desmos, RTI	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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<b>Supplemental Resources</b>
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**Technology:**  
 • Chromebooks • Online math manipulatives  
**Other:**  
 • Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives

<b>Differentiated Student Access to Content:        Recommended <i>Strategies &amp; Techniques</i></b>
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Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core
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): Information and Media Literacy</b>	
	<b><i>Core Ideas:</i></b>	<b>Digital tools and media resources provide access to vast stores of information that can be searched.</b>

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<b>LITERACIES &amp; KEY SKILLS</b>	<i>Performance Expectation/s:</i>	9.4.2.IML.1 Identify a simple search term to find information in a search engine or digital resource
	<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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