

Trimester	Unit Title	Recommended Instructional Days
3	Length in Customary Units	12-14 Days
<b>Domain</b>		
<p><b>Strand:</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #008000; margin-right: 5px;"></span> 2.MD.A.1-Measure and estimate lengths in standard units. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #008000; margin-right: 5px;"></span> 2.MD.A.2- Measure and estimate lengths in standard units. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #008000; margin-right: 5px;"></span> 2.MD.A.3- Measure and estimate lengths in standard units. Estimate lengths using units of inches, feet, centimeters, and meters.</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #008000; margin-right: 5px;"></span> 2.MD.B.5- Relate addition and subtraction to length. Use addition and subtraction. Use addition and subtraction within 100 to solve world problems involving length that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #008000; margin-right: 5px;"></span> 2.MD.B.6- Relate addition and subtraction to length. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ... , and represent whole-number sums and differences within 100 on a number line diagram.</li> <li><span style="display: inline-block; width: 15px; height: 15px; border: 1px solid #008000; margin-right: 5px;"></span> 2.MD.D.9- Represent and interpret data. Generate measurement data by measure lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in the whole-number units.</li> </ul> <p> <span style="display: inline-block; width: 15px; height: 15px; background-color: #008000; margin-right: 5px;"></span> <b>Major Cluster</b>                  <span style="display: inline-block; width: 15px; height: 15px; border: 1px solid #008000; margin-right: 5px;"></span> <b>Supporting Cluster</b>                  <span style="display: inline-block; width: 15px; height: 15px; border: 1px solid #008000; border-radius: 50%; margin-right: 5px;"></span> <b>Additional Cluster</b> </p>		
<p><b>Progress Indicator:</b> ◇ Tests ◇ Homework / Classwork ◇ Projects ◇ Formative assessments ◇ Summative 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 NJSL-CLKS within Unit**

**Essential Questions:**

- Lesson 8.1- How can you use inch models to measure length?  
Lesson 8.2- Why is using a ruler similar to using a row of color tiles to measure length?  
Lesson 8.3- How do you estimate the lengths of objects in inches?  
Lesson 8.4- How do you use an inch ruler to measure lengths?  
Lesson 8.5- How can drawing a diagram help when solving problems about length?  
Lesson 8.6- Why is measuring in feet different from measuring in inches?  
Lesson 8.7- How do you estimate the lengths of objects in feet?  
Lesson 8.8- How do you choose a measuring tool to use when measuring lengths?  
Lesson 8.9- How can a line plot be used to show measurement data?

**Essential Understandings:**

- Lesson 8.1- Use concrete models to measure the lengths of objects in inches.  
Lesson 8.2- Make an inch ruler and use it to measure the length of objects.  
Lesson 8.3- Estimate the lengths of objects by mentally partitioning the lengths into inches.  
Lesson 8.4- Measure the lengths of objects to the nearest inch using an inch ruler.  
Lesson 8.5- Solve addition and subtraction problems involving the lengths of objects by using the strategy draw a diagram.  
Lesson 8.6- Measure the lengths of objects in both inches and feet to explore the inverse relationship between size and number of units.  
Lesson 8.7- Estimate the lengths of objects in feet.  
Lesson 8.8- Select appropriate tools for measuring different lengths.  
Lesson 8.9- Measure the lengths of objects and use a line plot to display the measurement data.

**Vocabulary**

- foot
- inch
- line plot
- measuring tape
- yardstick

**Suggested Activity Description:**

Personal Math Trainer, Tutorial Videos, Vocabulary Game, Reading Grab and Go Activity, Explore and Guided/Independent Practice related to the NJSL, Evaluation Online Activity, Essential Question Discussion and Check –In, Basic Skills Review, Manipulative Activity, Reteach Activity, Reading Strategies Activity, Success for English Learners Activity, Performance Task

**Interdisciplinary Connections:**

**STEM Activity:** In Chapter 8, children extend their understanding of length in customary units, by learning how to appropriately measure and represent data. These same topics are used often in the development of various science concepts and process skills.

Page 3 of 6 Help children make the connection between math and science through the S.T.E.M. activities and activity worksheets found at Think Central.

In Chapter 8, children connect math and science with the S.T.E.M. Activity Let’s Check Again! and the accompanying worksheets (pages 105 and 106). Through this S.T.E.M. Activity, children will connect the GO MATH! Chapter 8 concepts and skills with various vocabulary and concept development including measurement. Children will also discover the overall role that math plays in science. Use this S.T.E.M. activity after Lesson 8.4

**Science:**

1. Divide the class into small groups. Give each group a ruler and a leaf. Ask groups to measure the length of their leaf in inches. • Have groups compare their measurements. Discuss how the lengths of the leaves are different. Ask children why they think the leaves are different sizes. Possible answer: Leaf size depends on many things, including the type of plant, how healthy the plant is, and how much sun and water it gets.
2. Ask children to list some different kinds of trees that they have seen. Explain that these different trees have similar qualities. • Have children discuss how they could use a measuring tape, a yardstick, and an inch ruler to measure the different parts of a tree. • Which tool would be the best tool to use to measure the distance around the trunk? measuring tape Which tool would be the best tool to use to measure the length of a leaf? inch ruler Which tool would be the best tool to use to measure the length of a branch? Explain. Check children’s answers for understanding that the best tool depends on the size and shape of the branch.

**Social Studies:**

1. Explain to children that there are rules for how the American flag is made, such as length compared to width, size of the blue box, and height of the stripes. • Distribute rulers and flags to groups. Discuss the flag as an important American symbol that must be treated with respect. • Have children measure different parts of the flag. If time allows, discuss the different measurements that children found.

2. Display various materials that are used when studying different topics in Social Studies, such as a globe, a map, an atlas, reference books, and so on. Have children describe what they know about these various materials. • Then have children discuss how they could use the inch ruler, yardstick, and measuring tape to measure these classroom objects. • Which objects are the best to measure with a measuring tape? Possible answer: globes  
Which objects are the best to measure with an inch ruler? Possible answer: books

**Language Arts:**

1. Vocabulary Builder pg. 539 - **Visualize It** Children should use the words they know about measurement to describe the lengths of different objects in the boxes. **Understand Vocabulary** Hold up two different-color crayons of obviously different lengths. Describe the crayons using the review words. For example: • The green crayon is longer than the purple crayon. • The purple crayon is shorter than the green crayon. Hold up 3 different-length pencils and identify the longest pencil and the shortest pencil.
2. Nature Walk - (From the Grab and Go Differentiated Center Kit)

**Spot Light On:** Show students the why behind how things are done when possible

<b>Social and Emotional Learning: Competencies</b>	<b>Social and Emotional Learning: Sub-Competencies</b>
SEL Competencies: • Self- awareness • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making	<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 • District Assessments • 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 <i>IEP/504/At-Risk/ESL</i></b>	<b>ELL Core Resources</b>	<b>Gifted &amp; Talented Core Resources</b>
Go Math Workbook, IXL, ST MATH 60 minutes a week, Personal Math Trainer, Math on the Spot Videos, My HRW, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, ST Math, Edulastic, Achieve the Core, Desmos,	Reteaching worksheets, Skill building workbook, Math manipulatives, Leveled practice worksheets	Dictionary for native language, Video tutorial in native language, Success for English Learners worksheets, Leveled Strategies for English Learners, Linguistic Support	ST Math special projects, G& T tasks, Enrichment worksheets, Art of Problem Solving, Leveled assessments
<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 <u>Strategies &amp; Techniques</u></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,	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	Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose

**Grade 2 Mathematics**  
**Unit 8 Length in Customary Units**

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	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.	dictionary, and modified assessment and/or rubric.	interest-based extension activities, and connect student to related
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<b>NJSLS CAREER READINESS, LIFE LITERACIES &amp; KEY SKILLS</b>	<b>Disciplinary Concept(s): Technology Literacy</b>		
	<b>Core Ideas:</b>	Digital tools have a purpose.	
	<b>Performance Expectation/s:</b>	9.4.2.TL.6 Illustrate and communicate ideas and stories using multiple digital tools	
	<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>