








Trimester	Unit Title	Recommended Instructional Days
3	Customary and Metric Measures	10-12 days
Domain: Measurement		
<p>Strand:</p> <div style="display: flex; flex-direction: column; gap: 10px;"> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"></div> <div> <p>4.M.A.1 Know relative sizes of measurement units within one system of units including km, m, cm, mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i></p> </div> </div> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"></div> <div> <p>4.M.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. </p> </div> </div> </div> <p>Key:</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;"> Major Cluster</div> <div style="text-align: center;"> Supporting Cluster</div> <div style="text-align: center;"> Additional Cluster</div> <div style="text-align: center;"> Climate Change Opportunity</div> </div>		
Mathematical Practices:		
<p>Progress Indicator: ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊ Summative assessments ◊ Performance assessments</p> <ol style="list-style-type: none"> 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 16.1: How do we use benchmarks to help identify the type of unit measurement to use when measuring objects?
Lesson 16.2: How do we convert and compare length measurements in customary units?
Lesson 16.3: How do we convert and compare weight measurements?
Lesson 16.4: How do we convert and compare liquid volume in customary units?
Lesson 16.5: How can we solve problems that involve mixed measurements?
Lesson 16.6: How can we convert and compare length measurements in metric units?
Lesson 16.7: How can we convert and compare mass and liquid volume measurements in metric units?

Essential Understandings:

- Lesson 16.1: Using benchmarks helps us select the appropriate unit of measurement for different objects, ensuring that we choose the most accurate and practical units for various measuring tasks.
Lesson 16.2: Converting and comparing length measurements in customary units involves understanding unit relationships and performing calculations to accurately compare different measurements.
Lesson 16.3: Converting and comparing weight measurements requires an understanding of weight units and conversion factors.
Lesson 16.4: Converting and comparing liquid volume in customary units helps us manage and understand different quantities of liquids.
Lesson 16.5: Solving problems involving mixed measurements requires us to integrate and manage different units, applying conversion and comparison skills to find accurate solutions.
Lesson 16.6: Converting and comparing length measurements in metric units involves understanding the metric system and applying conversion factors.
Lesson 16.7: Converting and comparing mass and liquid volume measurements in metric units helps us accurately manage and understand different quantities.

Vocabulary

- mile
- kilometer
- ounces
- pounds
- ton
- liquid volume
- gallons
- half gallons

- quarts
- pints
- cups
- fluid ounces
- decimeters
- millimeters
- milliliters

Suggested Activity Description:

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:

Language Arts:

1. Problem #14 on TB page 651.
2. Problem #13 on TB page 657.
3. Problem #12 on TB page 663.
4. Problem #14 on TB page 669.
5. Problem #11 on TB page 675.
6. Problem #12 on TB page 687.

Science:

1. See Cross-Curricular box on Teacher Edition page 663.

Social Studies:

1. See Cross-Curricular box on Teacher Edition page 663.

Physical Education:

1. Problem #12 on TB page 657.
2. Problem #9 on TB page 675.



Climate Change: Students may, knowing that energy and fuels are derived from natural resources and that their uses affect the climate, make a line plot to display a data set of measurements in fractions of a unit.

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

Social and Emotional Learning: <i>Competencies</i>		Social and Emotional Learning: <i>Sub-Competencies</i>	
SEL Competencies: • Self- awareness • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making		<ul style="list-style-type: none"> • Recognizing the importance of self-confidence in handling daily tasks and challenges. • Demonstrate an awareness of the expectations for social interactions in a variety of ways. • Demonstrate an understanding of the need for mutual respect when viewpoints differ. • Identify and apply ways to persevere through alternative methods to achieve goals. • Utilize positive communication and social skills to interact effectively with others. • Develop, implement, and model effective problem solving and critical thinking skills. 	
<p style="text-align: center;">Assessments (Formative) <i>To show evidence of meeting the standard/s, students will successfully engage within:</i></p>		<p style="text-align: center;">Assessments (Summative) <i>To show evidence of meeting the standard/s, students will successfully complete:</i></p>	
<p><u>Formative Assessments:</u> • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments</p>		<p><u>Benchmarks & Summative Assessments:</u> Chapter/Unit Assessments • Standardized Tests • Project-based Assessments</p>	
<p>Differentiated Student Access to Content: Teaching and Learning <i>Resources/Materials</i></p>			
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

Supplemental Resources			
<p>Technology:</p> <ul style="list-style-type: none"> • Chromebooks • Online math manipulatives <p>Other:</p> <ul style="list-style-type: none"> • Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives 			
Differentiated Student Access to Content: Recommended <i>Strategies & Techniques</i>			
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

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Disciplinary Concept(s): Responsible and Contributing Community Member	
	Core Ideas:	Curiosity and willingness to try new ideas (intellectual risk taking) contributes to the development of creativity and innovation.
	Performance Expectation/s:	9.4.5.CI.3: Participate in a brainstorming session with individuals with diverse perspectives to expand one’s thinking about a topic of curiosity.

	Career Readiness, Life Literacies, & Key Skills Practices
	<p>Act as a responsible and contributing community member and employee.</p> <p>Attend to financial well-being.</p> <p>Consider the environmental, social and economic impacts of decisions.</p> <p>Demonstrate creativity and innovation.</p> <p>Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>Model integrity, ethical leadership and effective management.</p> <p>Plan education and career paths aligned to personal goals.</p> <p>Use technology to enhance productivity, increase collaboration and communicate effectively.</p> <p>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>	X	Diversity & Inclusion: <i>N.J.S.A. 18A:35-4.36a</i>	X	Standards in Action: <i>Climate Change</i>