Marking Period	Unit Title	Recommended Instructional Days
4	**Convert Units of Measure**	8 - 12 days

Domain

Strand:

5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

Key:

Major Cluster **Supporting Cluster** **Additional Cluster**

Progress Indicator: ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊Summative assessments

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 10.1 How can you compare and convert customary units of length?
Lesson 10.2 How can you compare and convert customary units of capacity?
Lesson 10.3 How can you compare and convert customary units of weight?
Lesson 10.4 How can you solve multistep problems that include measurement conversions?
Lesson 10.5 How can you compare and convert metric units?
Lesson 10.6 How can you use the strategy, *make a table*, to help solve problems about customary and metric conversions?
Lesson 10.7 How can you solve elapsed time problems by converting units of time?

Essential Understandings:

Lesson 10.1 Compare, contrast and convert customary units of length.
Lesson 10.2 Compare, contrast and convert customary units of capacity.
Lesson 10.3 Compare, contrast and convert customary units of weight.
Lesson 10.4 Convert measurements to solve multistep problems.
Lesson 10.5 Compare, contrast and convert metric units.
Lesson 10.6 Solve problems about customary and metric conversions using the strategy, *make a table*.
Lesson 10.7 Convert units of time to solve elapsed time problems.

Vocabulary:

- Capacity
- Decimeter
- Dekameter
- Milligram
- Milliliter
- Weight

Suggested Activity Description(s):
Show what you know, Problem of the Day, Fluency Builders, Personal Math Trainer, Math on the Spot Videos, Real World Videos, Vocabulary Preview Activity, Reteach and Enrichment Activities, Interactive Student Edition Textbook, RtI Activities, Grab and Go Differentiated Centers, Journal Writing, Advanced Learners Activities, Assessments, Standards Focus Packets for the related NJSLS, Success for English Learners Activities, Performance Task

Interdisciplinary Connections:

STEM Activity: In Chapter 10, students extend their understanding of converting units of measure by solving elapsed time problems. These same topics are used often in the development of various science concepts and process skills. Help students make the connection between math, science, and engineering through the S.T.E.M. activities and activity worksheets found at www.thinkcentral.com.

In Chapter 10, students connect math, science, and engineering with the S.T.E.M. Activity Meeting People's Needs and the accompanying worksheets (pages 151 and 152). Through this S.T.E.M. Activity, students will connect to the GO Math! Chapter 10 concepts and skills with various components engineers need to design technological devices, including converting time units. It is recommended that this S.T.E.M. Activity be used after Lesson 10.7.

Science:
1. A force is a push or pull that causes an object to move, stop, or change direction. Different forces act on a race car to make it move, speed up, and turn as it drives around the track. In 2010, Dario Franchitti won the Indy 500 with a race speed of over 160 miles per hour. The race is 500 miles long. What is the length of the race in yards?

2. Earth and its moon have a lot in common, but they also have some differences. Both are made from the same elements, both have craters, and both are rocky. Earth is much larger than its moon, and has a greater pull of gravity. The diameter of the moon is about 3,476 km; the diameter of Earth is about 12,700 km. What are the diameters of Earth and its moon in meters?

Social Studies:
1. Construction on the Panama Canal began in 1904, when Theodore Roosevelt was president. The Panama Canal connects the Atlantic and Pacific oceans and links American ports on the Atlantic coast with those on the Pacific coast to allow for more efficient trade routes. The canal is 50 miles long between the deep waters of both oceans. How many feet long is the Panama Canal from the deep waters of the Atlantic to the deep waters of the Pacific?

2. Mount Denali, part of the Alaska Range chain of mountains, is the highest point in North America. Its name is fitting because Denali means "the high one" in Athabaskan dialect. Its peak reaches an altitude of 6,194 meters. It can take anywhere from 14 days to 5 weeks, depending on the weather, to climb to the summit of Mount Denali. How tall is Mount Denali in kilometers?

Language Arts:
1. Vocabulary Builder Activity, Go Math pg. 584
2. Vocabulary Game, Go Math pg. 584 A
3. The Write Way, Go Math pg. 584 B
4. Grab and Go Reader - A Math Mix-Up

Spot Light On: *Acknowledge every student's comment or response, even if it's incorrect.*

Social and Emotional Learning: ***Competencies***	**Social and Emotional Learning:** ***Sub-Competencies***
SEL Competencies: • Self- awareness • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making	• 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.
Assessments (Formative) ***To show evidence of meeting the standard/s, students will successfully engage within:***	**Assessments (Summative)** ***To show evidence of meeting the standard/s, students will successfully complete:***
Formative Assessments: • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments	**Benchmarks & Summative Assessments:** Chapter/Unit Assessments • Standardized Tests • District Assessments • Project-based Assessments

Differentiated Student Access to Content:
Teaching and Learning *Resources/Materials*

Core Resources	**Alternate Core Resources** *IEP/504/At-Risk/ESL*	**ELL Core Resources**	**Gifted & Talented Core Resources**
Go Math Workbook, IXL, Personal Math Trainer, Math on the Spot Videos, My HRW, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, 60 minutes of weekly 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, Go Math Leveled Strategies for English Learners, Go Math Linguistic Support	ST Math Challenge Objectives, G&T tasks, Enrichment worksheets, Art of Problem Solving, Leveled assessments, Go Math Teaching for Depth

Supplemental Resources

Technology:
• Chromebooks • Online math manipulatives
Other:
• Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives

Differentiated Student Access to Content: **Recommended *Strategies & Techniques***			
Core Resources	**Alternate Core Resources** *IEP/504/At-Risk/ESL*	**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.	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 students to related content.

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	**Disciplinary Concept(s):** Education and Career	
	Core Ideas:	With a growth mindset, failure is an important part of success.
	Performance Expectation/s:	**9.4.12.CI.1**: Demonstrate the ability to reflect, analyze, and use creative skills and ideas.
	Career Readiness, Life Literacies, & Key Skills Practices	
	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.**

New Jersey Legislative Statutes and Administrative Code (place an "X" before each law/statute if/when present within the curriculum map)									
	Amistad Law: *N.J.S.A. 18A 52:16A-88*		Holocaust Law: *N.J.S.A. 18A:35-28*		LGBT and Disabilities Law: *N.J.S.A. 18A:35-4.35*	**x**	Diversity & Inclusion: *N.J.S.A. 18A:35-4.36a*		Standards in Action: *Climate Change*