Marking Period	Unit Title	Recommended Instructional Days
1	Numbers	24 - 28
Domain		

Strand:

◎ **6.NS.B.4** Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4 (9 + 2)$.

■ **6.NS.C.5** Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining

■ **6.NS.C.6** Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.

■ **6.NS.C.7** Understand ordering and absolute value of rational numbers.
a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret -3 > -7 as a statement that -3 is located to the right of -7 on a number line oriented from left to right.

■ **6.NS.C.7** Understand ordering and absolute value of rational numbers.
b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write -3° C > -7° C to express the fact that -3° C is warmer than -7° C.

■ **6.NS.C.7** Understand ordering and absolute value of rational numbers.

c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of -30 dollars, write |-30| = 30 to describe the size of the debt in dollars.

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:
Module 1:
How can you use integers to solve real-world problems?
How do you identify an integer and its opposite?
How is a number different from its absolute value?
How can you determine the position of a number on the number line?
How do you compare and order integers?
How do you create a number line to display given values adequately?
How do you find and use absolute value?

Module 2:
How can you use the greatest common factor and least common multiple to solve real-world problems?
How can you find and use the greatest common factor of two whole numbers?
How do you find and use the least common multiple of two numbers?

Module 3:
How can you use rational numbers to solve real-world problems?
How can you classify rational numbers?
How do you identify opposites and absolute values of rational numbers?
How do you compare and order rational numbers?

Essential Understandings:
Module 1:
Numbers can be represented with negative values.

Module 2:
The LCM and GCF of two or more numbers help in finding out quick solutions.

Module 3:
Numbers can be represented in different forms.
The number system is a way of organizing and classifying numbers.

Vocabulary:
- positive numbers
- negative numbers
- opposites
- integers
- inequality
- absolute value
- greatest common factor (GCF)
- least common multiple (LCM)
- rational number
- Venn diagram

Encourage students to practice using the unit vocabulary as they talk and write about mathematics. Understanding vocabulary will aid their understanding of the concepts.

Suggested Activity Descriptions:
- Use masking tape to mark off a number line on the floor from -10 to 10. Assign five students a number and have them order themselves without talking, but allow the class to help. Repeat and make the numbers increasingly more difficult.
- Use the same masking tape number line, but repeat with a slightly different variation. Use three different colored papers or markers for fractions, decimals, and percents. Teach students to order like forms of numbers by passing out the cards, then asking students to order themselves on the number line.
- Provide students with various situations and have them write positive or negative numbers to represent said situations. *Examples: a gain of 35 yards, -112℃ is warmer than -143℃, a withdrawal of $190, etc.*
- GoMATH Activity 3.2: Magnitude Madness on GoMATH pages 58A - 58B.
- GoMATH Unit 1 Review Project: Euclid's Method

◇Suggested Sample Tasks:
1. Find x: $4.20 ÷ $1.40 = x

2. 46.91 - 28.7

3. Kim and Martin swam 50 meters. Martin took 0.26 seconds longer than Kim. Kim's time was 50.9 seconds. What was Martin's time in the race?

Interdisciplinary Connections:
Science:
1. Careers in Math: Climatologist on GoMATH page 1.
2. Performance Task: Careers in Math: Climatologist on GoMATH page 70.
3. As per grade appropriate science curriculum, students can use NASA Climate Kids to research and discuss climate, weather, temperature, and more as it pertains to mathematics.

Social Studies:
1. Historical Fact References to negative numbers can be traced back as far as 200 BCE to the Chinese rod system. Red rods represented positive numbers and black rods represented negative numbers, which were used to cancel out the red rods. The next mention of negative numbers can be traced to the seventh century Hindu mathematician Brahmagupta. He used fortunes to describe positive numbers and debts to describe negative numbers. He also formulated the rules for integer computation. (GoMATH TE page 8)

Language Arts:
1. Vocabulary Preview Activity on GoMATH page 2.
2. Reading Start-Up Activities on GoMATH pages 4, 28, and 44.

Spot Light On: Rachel Carson	

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	Reteaching worksheets, Skill building workbook, Math manipulatives, Leveled practice worksheets	Dictionary for native language, Video tutorial in native language, Success for English Learners worksheets, GoMATH Leveled Strategies for English Learners, GoMATH Linguistic Support	ST Math Challenge Objectives, G&T tasks, Enrichment worksheets, Art of Problem Solving, Leveled assessments, GoMATH Teaching for Depth

minutes of weekly ST Math, Edulastic, Achieve the Core, Desmos			

Supplemental Resources			

Technology:
• Chromebooks • Scientific/Graphing Calculators (upper grades only) • 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 student to related content.

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	**Disciplinary Concept(s):** Critical Thinking and Problem Solving	
	Core Ideas:	An essential aspect of problem solving is being able to self reflect on why possible solutions for solving problems were or were not successful.
	Performance Expectation/s:	9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option.
	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*	X	LGBT and Disabilities Law: *N.J.S.A. 18A:35-4.35*	X	Diversity & Inclusion: *N.J.S.A. 18A:35-4.36a*	X	Standards in Action: *Climate Change*