Trimester	Unit Title	Recommended Instructional Days
3	**Two-Dimensional Figures**	**10-12 days**

Domain: Geometry; Measurement; Operations and Algebraic Thinking

Strand:

 **4.G.A.1** Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

 **4.G.A.2** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

 **4.G.A.3** Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

 **4.M.B.4** Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.
a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$*th* of a circle is called a "one degree angle," and can be used to measure angles.

 **4.M.B.4** Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.
b. An angle that turns through n one-degree angles is said to have an angle measure of *n* degrees.

4.OA.C.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.*

Key:

Major Cluster **Supporting Cluster** **Additional Cluster** **Climate Change Opportunity**

Progress Indicator: ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊ Summative assessments ◊ Performance 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 14.1: How do we identify and draw points, lines, line segments, rays, and angles?
Lesson 14.2: How can we classify triangles by the sizes of their angles?
Lesson 14.3: How can we identify and draw parallel lines and perpendicular lines?
Lesson 14.4: How can we draw a diagram to classify plane shapes?
Lesson 14.5: How can we check if a shape has line symmetry?
Lesson 14.6: How can we identify and draw lines of symmetry?
Lesson 14.7: How can we use the strategy "act it out" to solve pattern problems?

Essential Understandings:
Lesson 14.1: Identifying and drawing points, lines, line segments, rays, and angles helps us understand the basic elements of geometry, forming the foundation for more complex geometric concepts and shapes.
Lesson 14.2: Triangles can be classified by the sizes of their angles, allowing us to categorize and differentiate between types of triangles.
Lesson 14.3: Identifying and drawing parallel and perpendicular lines helps us understand their distinct properties and relationships, which are fundamental concepts in geometry.
Lesson 14.4: Drawing diagrams to classify plane shapes enables us to visually organize and understand the different categories and properties of shapes.
Lesson 14.5: Checking if a shape has line symmetry helps us understand when a shape can be divided into matching parts.
Lesson 14.6: Identifying and drawing lines of symmetry allows us to see and create symmetrical shapes.
Lesson 14.7: We can extend patterns to help us solve problems.

Vocabulary
- acute angle
- angle
- line
- line segment
- obtuse angle
- point
- ray
- right angle
- straight angle
- acute triangle
- obtuse triangle
- right triangle
- intersecting lines
- parallel lines
- perpendicular lines
- venn diagram
- line of symmetry
- line symmetry

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 #3 on TB page 581.
2. Problem #3 on TB page 599.

Physical Education:
1. Problem #12 on TB page 570.

Spot Light On: *Ask challenging questions equitably of all students.*

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:***
<u>Formative Assessments:</u> • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments	**<u>Benchmarks & Summative Assessments:</u>** Chapter/Unit Assessments • Standardized Tests • 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, 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			
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, 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,	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

	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.		

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*