Updated August 2024

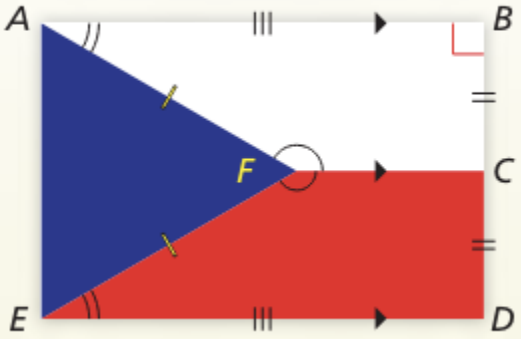
Marking Period	Unit Title	Recommended Instructional Days
1	Congruent Triangles	15-18 days

Domain: Geometry

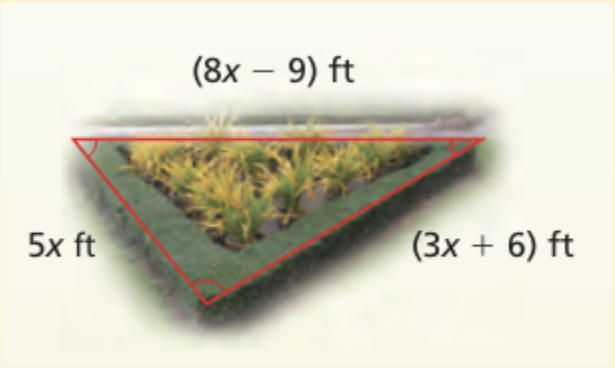
NJSLS Strand: **Key**: ■ Major Cluster □ Supporting Cluster ◎ Additional Cluster ■ ***G.CO.B.6: Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.*** ■ ***G.CO.B.7: Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.*** ■ ***G.CO.B.8: Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.***	***Progress Indicator:*** ***Tests ● Quizzes ● Practice problems for homework ● Online textbook ● Worksheets ● Leveled assessments***	**Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLS-CLKS within Unit** **<u>Essential Questions:</u>** **1. How are the side lengths and angle measures related in isosceles triangles and equilateral triangles?** **2. How are SAS and SSS used to show that two triangles are congruent?** **3. How are ASA and AAS used to show that two triangles are congruent?** **4. What minimum criteria are needed to show that right triangles are congruent?** **5. Which theorems can be used to prove that two overlapping triangles are congruent?** **<u>Activity Description</u>:** • **Angles of triangles** • **Congruent Polygons** • **Proving Triangle congruence by SAS** • **Equilateral and Isosceles Triangles** • **Proving Triangle congruence by SSS** • **Proving Triangle congruence by ASA and AAS** **<u>Interdisciplinary Connections:</u>** **Topic 4 Project,** **Design a Bridge** **You and your classmates will analyze different truss bridge designs and how congruent triangles are used in each construction. What type of truss would you use in a bridge design, and why?** Career Readiness, Life Literacies and Key Skills **Content: Engineering. NJSLS#: G.MG.A.1, G.MG.A.3**

G.CO.C.10: Prove theorems about triangles. Theorems include: measures of interior angles of a triangle, sum to 180 degrees; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. ***G.SRT.B.5: Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.***		**(Next Generation Science Standards ETS1-2, ETS1-4)** **Spot Light On:** **Holocaust Law** **LESSON: Introduction to the Holocaust: One Day Lesson** **GRADE LEVEL:** Adaptable for grades 7–12 **SUBJECT:** Multidisciplinary **TIME REQUIRED:** Approximately 60 minutes **This is a *foundational* lesson that introduces key concepts and information to students.** **RATIONALE** The Holocaust was a watershed event in human history that involved millions of people across the globe. This lesson provides an introduction to the Holocaust by defining the term and highlighting the story of one Holocaust survivor, Gerda Weissmann. **NOTE:** This lesson is designed as a one-class period introduction to the Holocaust for educators with limited time. Lessons that expand on themes presented are noted in extensions. **OVERVIEW** **ESSENTIAL QUESTIONS** • What was the Holocaust? • What was the experience of one young girl in the Holocaust? • What questions can help students begin to understand the Holocaust? • How does annotation help you make a personal and critical connection to text? **Example Tasks:** **Task 1:** Classify △ABC by its sides. Then determine whether it is a right triangle. $A(-2, 3), B(3, 4), C(1, -1)$ $A(2, 3), B(6, 3), C(2, 7)$ **Task 2:**

The figure shows the flag of the Czech Republic. Write a congruence statement for two of the polygons. Then show that those polygons are congruent.



Task 3:
Find the perimeter of the triangular hedge.



Mathematics 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.		
Social and Emotional Learning: ***Competencies***	**Social and Emotional Learning:** ***Sub-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. Recognize the skills needed to establish and achieve personal and educational 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)		**Assessments (Summative)**

To show evidence of meeting the standard/s, students will successfully engage within:	***To show evidence of meeting the standard/s, students will successfully complete:***
Formative Assessments: ● Entry and Exit Slips ● Quizzes ● Self Assessments	**Benchmarks:** ● Chapter Tests ● Projects ● LinkIT **Summative Assessments:** ● District Assessments ● Midterms ● Standardized Tests

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**
● Textbooks websites ● Achieve the core ● Khan Academy ● Desmos ● GeoGebra	● Skill building worksheets ● Math Manipulatives	● Dictionary for native languages ● Videos in their native language.	● Leveled Assessments ● Enrichment worksheets

Supplemental Resources
Technology: ● **Chromebooks, Graphing Calculators, Online math manipulatives** **Other:** ● **Zoom and Google Meets, Schoology, Interactive Textbooks, Private Tutoring**

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, 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: Creativity and Innovation**	
	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 (e.g., 1.1.12prof.CR3a).**
	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*	**X**	Holocaust Law: *N.J.S.A. 18A:35-28*		LGBT and Disabilities Law: *N.J.S.A. 18A:35-4.35*		Diversity & Inclusion: *N.J.S.A. 18A:35-4.36a*		Standards in Action: *Climate Change*