HS Advanced Geometry Curriculum

This curricula and accompanying instructional materials have been developed to align with the NJSLS and in accordance with the NJ Department of Education's guidelines to include: Curriculum designed to meet grade level expectations, integrated accommodations and modifications for students
with IEPs, 504s, ELLs, and gifted and talented students, assessments including benchmarks, formative, summative, and alternative assessments, a list of core instructional and supplemental materials, pacing guide, interdisciplinary connections, integration of 21ˢᵗ century skills, integration of technology, and integration of 21ˢᵗ Century Life and Career standards.

About the Standards

In 1996, the New Jersey State Board of Education adopted the state's first set of academic standards called the Core Curriculum Content Standards. The standards described what students should know and be able to do upon completion of a thirteen-year public school education. Over the last twenty years, New Jersey's academic standards have laid the foundation for local district curricula that is used by teachers in their daily lesson plans.

Revised every five years, the standards provide local school districts with clear and specific benchmarks for student achievement in nine content areas. Developed and reviewed by panels of teachers, administrators, parents, students, and representatives from higher education, business, and the community, the standards are influenced by national standards, research-based practice, and student needs. The standards define a "Thorough and Efficient Education" as guaranteed in 1875 by the New Jersey Constitution. Currently the standards are designed to prepare our students for college and careers by emphasizing high-level skills needed for tomorrow's world.

The New Jersey Student Learning Standards include Preschool Teaching and Learning Standards, as well as nine K-12 standards for the following content areas: **21st Century Life and Careers, Comprehensive Health and Physical Education, English Language Arts, Mathematics, Science, Social Studies, Technology, Visual and Performing Arts, World Languages**

Interdisciplinary Connections

L.11-12.6. Acquire and use accurate general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

8.1.12.DA.5: Create data visualizations from large data sets to summarize, communicate, and support different interpretations of real-world phenomena.

Integration of Technology

9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.).

9.4.12.TL.2: Generate data using formula-based calculations in a spreadsheet and draw conclusions about the data

9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments. • 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem (e.g., 7.1.AL.IPERS.6).

21ˢᵗ Century Skills

9.4.12.CI.2: Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).

9.4.12.CI.3: Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).

9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).

9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).

9.4.12.CT.3: Enlist input from a variety of stakeholders (e.g., community members, experts in the field) to design a service learning activity that addresses a local or global issue (e.g., environmental justice).

9.4.12.CT.4: Participate in online strategy and planning sessions for course-based, school-based, or other project and determine the strategies that contribute to effective outcomes.

9.4.12.DC.1: Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content (e.g., 6.1.12.CivicsPR.16.a).

9.4.12.DC.2: Compare and contrast international differences in copyright laws and ethics.

9.4.12.DC.3: Evaluate the social and economic implications of privacy in the context of safety, law, or ethics (e.g., 6.3.12.HistoryCA.1).

9.4.12.DC.4: Explain the privacy concerns related to the collection of data (e.g., cookies) and generation of data through automated processes that may not be evident to users (e.g., 8.1.12.NI.3).

9.4.12.DC.5: Debate laws and regulations that impact the development and use of software.

9.4.12.DC.6: Select information to post online that positively impacts personal image and future college and career opportunities.

9.4.12.DC.7: Evaluate the influence of digital communities on the nature, content and responsibilities of careers, and other aspects of society (e.g., 6.1.12.CivicsPD.16.a).

9.4.12.DC.8: Explain how increased network connectivity and computing capabilities of everyday objects allow for innovative technological approaches to climate protection.

9.4.12.GCA.1: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why some solutions (e.g., political. economic, cultural) may work better than others (e.g., SL.11-12.1., HS-ETS1-1, HS-ETS1-2, HS-ETS1-4, 6.3.12.GeoGI.1, 7.1.IH.IPERS.6, 7.1.IL.IPERS.7, 8.2.12.ETW.3).

9.4.12.IML.1: Compare search browsers and recognize features that allow for filtering of information. • 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.

9.4.12.IML.3: Analyze data using tools and models to make valid and reliable claims, or to determine optimal design solutions (e.g., S-ID.B.6a., 8.1.12.DA.5, 7.1.IH.IPRET.8)

9.4.12.IML.4: Assess and critique the appropriateness and impact of existing data visualizations for an intended audience (e.g., S-ID.B.6b, HS-LS2-4).

9.4.12.IML.5: Evaluate, synthesize, and apply information on climate change from various sources appropriately (e.g., 2.1.12.CHSS.6, S.IC.B.4, S.IC.B.6, 8.1.12.DA.1, 6.1.12.GeoHE.14.a, 7.1.AL.PRSNT.2).

9.4.12.IML.6: Use various types of media to produce and store information on climate change for different purposes and audiences with sensitivity to cultural, gender, and age diversity (e.g., NJSLSA.SL5).

9.4.12.IML.7: Develop an argument to support a claim regarding a current workplace or societal/ethical issue such as climate change (e.g., NJSLSA.W1, 7.1.AL.PRSNT.4).

9.4.12.IML.8: Evaluate media sources for point of view, bias, and motivations (e.g., NJSLSA.R6, 7.1.AL.IPRET.6).

9.4.12.IML.9: Analyze the decisions creators make to reveal explicit and implicit messages within information and media (e.g., 1.5.12acc.C2a, 7.1.IL.IPRET.4).

Career Education

9.2.12.CAP.1: Analyze unemployment rates for workers with different levels of education and how the economic, social, and political conditions of a time period are affected by a recession. • 9.2.12.CAP.2: Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.
9.2.12.CAP.3: Investigate how continuing education contributes to one's career and personal growth.
9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g., costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.
9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.
9.2.12.CAP.8: Determine job entrance criteria (e.g., education credentials, math/writing/reading comprehension tests, drug tests) used by employers in various industry sectors.
9.2.12.CAP.9: Locate information on working papers, what is required to obtain them, and who must sign them.
9.2.12.CAP.10: Identify strategies for reducing overall costs of postsecondary education (e.g., tuition assistance, loans, grants, scholarships, and student loans).
9.2.12.CAP.11: Demonstrate an understanding of Free Application for Federal Student Aid (FAFSA) requirements to apply for postsecondary education.
9.2.12.CAP.12: Explain how compulsory government programs (e.g., Social Security, Medicare) provide insurance against some loss of income and benefits to eligible recipients.
9.2.12.CAP.13: Analyze how the economic, social, and political conditions of a time period can affect the labor market.
9.2.12.CAP.14: Analyze and critique various sources of income and available resources (e.g., financial assets, property, and transfer payments) and how they may substitute for earned income.
9.2.12.CAP.15: Demonstrate how exemptions, deductions, and deferred income (e.g., retirement or medical) can reduce taxable income.
9.2.12.CAP.16: Explain why taxes are withheld from income and the relationship of federal, state, and local taxes (e.g., property, income, excise, and sales) and how the money collected is used by local, county, state, and federal governments.
9.2.12.CAP.17: Analyze the impact of the collective bargaining process on benefits, income, and fair labor practice.
9.2.12.CAP.18: Differentiate between taxable and nontaxable income from various forms of employment (e.g., cash business, tips, tax filing and withholding).
9.2.12.CAP.19: Explain the purpose of payroll deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay, including the cost of employee benefits to employers and self-employment income.
• 9.2.12.CAP.20: Analyze a Federal and State Income Tax Return.
9.2.12.CAP.21: Explain low-cost and low-risk ways to start a business.
9.2.12.CAP.22: Compare risk and reward potential and use the comparison to decide whether starting a business is feasible.
9.2.12.CAP.23: Identify different ways to obtain capital for starting a business.

Lower Cape May Regional School District Advanced Geometry Curriculum

Content Area: Mathematics	
Course Title: HS Advanced Geometry	**Grade level: 9-12**
Unit 1: Basics, Proofs, and Parallel and Perpendicular Lines	**September - November**
Unit 2: Transformations and Triangles	**November - February**
Unit 3: Polygons and Similarity	**February - April**
Unit 4: Trig Ratios, and Circles	**April - June**
Date Created:	**Board Approved On:**

Lower Cape May Regional School District HS Advanced Geometry Curriculum Unit 1 Overview

Unit Title: Basics, Proofs, and Parallel and Perpendicular Lines

Target Course/Grade Level: 9-12

Unit Summary:

  In Unit 1:
  ● Prove geometric theorems

Interdisciplinary Connections:
  ● Sciences, especially Physics and Biology
  ● Language Arts

21st Century Themes, Skills, and Standards:
 P2 - Apply appropriate academic and technical skills.
 P4 - Communicate clearly and effectively and with reason.
 P8- Utilize critical thinking to make sense of problems and persevere in solving them.
 P11- Use technology to enhance productivity.

Learning Targets	
CPI #	**Cumulative Progress Indicators (CPI) for Unit**
#1 G.CO.C.9	Prove theorems about lines and angles.
#2 G.GPE.B.5	Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems.

#3 G.CO.A.1	Know precise definitions of angle, perpendicular line, parallel line,and line segment, based on the undefined notions of point, line, and distance along a line.

Unit Enduring Questions:
- How do I define angles, circles, parallel lines, perpendicular lines and line segments using the undefined notion of a point, line, distance along a line and distance around a circular arc?
- How can I prove theorems involving lines, angles, triangles, and parallelograms?
- How can I use the slopes of parallel and perpendicular lines to solve geometric problems?

Unit Enduring Understandings:
- Use the undefined notion of a point, line, distance along a line and distance around a circular arc to develop definitions for angles, circles, parallel lines, perpendicular lines and line segments.
- Construct and explain formal proofs of theorems involving lines, angles, triangles, and parallelograms.
- Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems.

Unit Objectives:
Students
will know….
- Point, line, plane, distance along a line, and distance around a circular arc as indefinable notions.
- A formal proof may be represented with a paragraph proof or a two-column proof.

Unit Objectives: *Students will be able to…...*
- use point, line, and distance along a line to give a precise definition of
- angle;
- perpendicular line (two lines are perpendicular if an angle formed by the two lines at the point of intersection is a right angle);
- parallel lines (distinct lines that have no point in common);
- and line segment.
- construct and explain proofs of theorems about lines and angles including:
  - vertical angles are congruent;
  - congruence of alternate interior angles;
  - congruence of corresponding angles;
  and points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
- prove the slope criteria for parallel lines (parallel lines have equivalent slopes)

	● prove the slope criteria for perpendicular lines (the product of the slopes of perpendicular lines equals -1). ● solve problems using the slope criteria for parallel and perpendicular lines.

Lower Cape May Regional School District Advanced Geometry Curriculum Unit 2 Overview
Content Area: Mathematics
Unit Title: Transformations and Triangles
Target Course/Grade Level: 9-12
Unit Summary: **In Unit 2:**   ● **Experiment with transformations in the plane.**   ● **Understand congruence in terms of rigid motions.**
Interdisciplinary Connections: ● Art   ● Sciences, especially Physics   ● History and Social Studies
21st Century Themes, Skills, and Standards: **P2 - Apply appropriate academic and technical skills.**   **P4 - Communicate clearly and effectively and with reason.**   **P8- Utilize critical thinking to make sense of problems and persevere in solving them.**   **P11- Use technology to enhance productivity.**

Learning Targets	
CPI #	**Cumulative Progress Indicators (CPI) for Unit**
#1 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.
#2 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.
#3 G.CO.B8	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions

#4 G.SRT.A.1.	Verify experimentally the properties of dilations given by a center and a scale factor.
#5 G.CO.C.10.	Prove theorems about triangles.
#6 G.SRT.B.4.	Prove theorems about triangles.

Unit Enduring Questions:	**Unit Enduring Understandings:**
● How are rigid transformations different from dilations, horizontal stretches and vertical stretches? ● What rotations and reflections carry a rectangle, parallelogram, trapezoid, or regular polygon onto itself? ● What sequence of transformations is required in order to map one figure onto another? ● How can I use corresponding pairs of sides and corresponding pairs of angles to show that two triangles are congruent? ● What are the properties of dilations using a center and a scale factor?	● Represent transformations in the plane using transparencies, describe and explain transformations as functions, and compare rigid transformations to dilations, horizontal stretches and vertical stretches. ● Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself, and identify lines of symmetry. ● Develop formal definitions of rotations, reflections, and translations. ● Draw transformed figures using graph paper, tracing paper, and/or geometry software and identify a sequence of transformations required in order to map one figure onto another. ● Use rigid transformations to determine and explain congruence of geometric figures. ● Show and explain that two triangles are congruent by using corresponding pairs of sides and corresponding pairs of angles, and by using rigid motions (transformations). ● Show and explain how the criteria for triangle congruence extend from the definition of congruence in terms of rigid motion. ● Verify the properties of dilations given by a center and a scale factor. ● Construct and explain formal proofs of theorems involving triangles. ● Prove theorems about triangles.

Unit Objectives:	**Unit Objectives:** *Students*
Students will know….	*will be able to…...*
● Congruence in terms of rigid motion.	● predict the outcome of a transformation on a figure.
● Triangle congruence in terms of rigid motion.	● given a description of the rigid motions, transform figures.
● Criteria for triangle congruence.	● given two figures, decide if they are congruent by applying rigid motions.
● Dilation of a line that passes through the center of dilation results in the same line.	● given that two triangles are congruent based on rigid motion, show that corresponding pairs of sides and angles are congruent.
● Dilation of a line that does not pass through the center of dilation results in a line that is parallel to the original line.	● given that corresponding pairs of sides and angles of two triangles are congruent, show, using rigid motion (transformations) that they are congruent.
● Dilation of a line segment results in a longer line segment when, for scale factor k, |k| is greater than 1.	● show and explain the criteria for Angle-Side-Angle triangle congruence.
● Dilation of a line segment results in a shorter line segment when, for scale factor k, |k| is less than 1.	● show and explain the criteria for Side-Angle-Side triangle congruence.
	● show and explain the criteria for Side-Side-Side triangle congruence.
	● explain the relation of the criteria for triangle congruence to congruence in terms of rigid motion.
	● perform dilations in order to verify the impact of dilations on lines and line segments.
	● construct and explain proofs of theorems about triangles including:
	- sum of interior angles of a triangle;
	- congruence of base angles of an isosceles triangle;
	- 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.
	● construct and explain proofs of theorems about triangles including:

	- a line parallel to one side of a triangle divides the other two sides proportionally; - the Pythagorean Theorem (using triangle similarity)

Lower Cape May Regional School District Advanced Geometry Curriculum Unit 3 Overview	
Content Area: Mathematics	
Unit Title: Polygons and Similarity	
Target Course/Grade Level: 9-12	
Unit Summary: **In Unit 3:** ● **Understand properties of polygons** ● **Understand similarity in terms of similarity transformations.**	
Interdisciplinary Connections: ● Art ● Sciences, especially Physics ● History and Social Studies	
21st Century Themes, Skills, and Standards: **P2 - Apply appropriate academic and technical skills.** **P4 - Communicate clearly and effectively and with reason.** **P8- Utilize critical thinking to make sense of problems and persevere in solving them.** **P11- Use technology to enhance productivity.**	

Learning Targets	
CPI #	**Cumulative Progress Indicators (CPI) for Unit**
#1 G.CO.C.11	Prove theorems about parallelograms.
#2 G.GPE.B.4.	Use coordinates to prove simple geometric theorems algebraically.
#3 G.GPE.B.6.	Find the point on a directed line segment between two given points that partitions the segment in a given ratio.
#4 G.GPE.B.7.	Use coordinates to compute perimeters of polygons and areas of triangles and rectangles.

Unit Enduring Questions:	Unit Enduring Understandings:
● How do I find the point on a directed line segment between two given points that partitions the segment in a given ratio? ● How do I use coordinates to prove simple geometric theorems algebraically? ● How are two given figures similar in terms of similarity transformations? ● How can I use congruence and similarity criteria for triangles to solve problems?	● Construct and explain formal proofs of theorems involving parallelograms. ● Find the point on a directed line segment between two given points that partitions the segment in a given ratio and use coordinates to compute perimeters of polygons and areas of triangles and rectangles. ● Use coordinates to prove simple geometric theorems algebraically. ● Use the definition of similarity in terms of similarity transformations to decide if two given figures are similar and explain, using similarity transformations, the meaning of triangle similarity. ● Use the properties of similarity transformations to establish the Angle-Angle criterion for two triangles to be similar. ● Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.

Unit Objectives:	Unit Objectives:
Students will know….	*Students will be able to…...*
● Similarity transformations are used to determine the similarity of two figures. ● Angle-Angle criterion for similarity. ● Corresponding parts of congruent triangles are congruent (CPCTC). ● Real-world objects can be described, approximately, using geometric shapes, their measures, and their properties.	● construct and explain proofs of theorems about parallelograms including: - opposite sides are congruent; - opposite angles are congruent; - the diagonals of a parallelogram bisect each other; - rectangles are parallelograms with congruent diagonals. ● use coordinates to prove geometric theorems including: - prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle (or other quadrilateral) ● locate the point on a directed line segment that creates two segments of a given ratio. ● find perimeters of polygons using coordinates, the Pythagorean theorem and the distance formula. ● find areas of triangle and rectangles using coordinates. ● given two figures, determine, using transformations, if they are similar. ● explain, using similarity transformations, the meaning of similarity for triangles. ● explain Angle-Angle criterion and its relationship to similarity transformations and properties of triangles. ● prove geometric relationships in figures using criteria for triangle congruence. ● solve problems using triangle congruence criteria (SSS, ASA, SAS, HL). ● solve problems using triangle similarity criteria (AA).

Lower Cape May Regional School District Advanced Geometry Curriculum Unit 4 Overview	
Content Area: Mathematics	
Unit Title: Trig Ratios and Circles	
Target Course/Grade Level: 9-12	
Unit Summary: **In Unit 4:** ● **Define trigonometric ratios and solve problems involving right triangles.** ● **Understand and apply theorems about circles.**	
Interdisciplinary Connections: ● Art ● Sciences, especially Physics ● History and Social Studies	
21st Century Themes, Skills, and Standards: **P2 - Apply appropriate academic and technical skills.** **P4 - Communicate clearly and effectively and with reason.** **P8- Utilize critical thinking to make sense of problems and persevere in solving them.** **P11- Use technology to enhance productivity.**	
Learning Targets	
CPI #	**Cumulative Progress Indicators (CPI) for Unit**
#1 G.SRT.C.6.	Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
#2 G.SRT.C.7.	Explain and use the relationship between the sine and cosine of complementary angles.
#3 G.SRT.C.8.	Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.
#4 G.C.A.1.	Prove that all circles are similar.
#5 G.C.A.2	Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
#6 G.C.A.3.	Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.

Unit Enduring Questions:	Unit Enduring Understandings:
● What is the relationship between the sine and cosine of complementary angles?	● Solve design problems using geometric methods.
● How can I use trigonometric ratios and the Pythagorean Theorem to compute all angle measures and side lengths of triangles in applied problems?	● Show and explain that definitions for trigonometric ratios derive from similarity of right triangles.
● What is the equation of a circle given the center and radius?	● Explain and use the relationship between the sine and cosine of complementary angles; use trigonometric ratios and the Pythagorean Theorem to compute all angle measures and side lengths of triangles in applied problems.
● Are all circles similar?	● Derive the equation of a circle of given the center and radius using the Pythagorean Theorem. Given an equation, complete the square to find the center and radius of the circle.
● What are the relationships among inscribed angles, radii, and chords	● Prove that all circles are similar.
	● Identify and describe relationships among inscribed angles, radii, and chords; use these relationships to solve problems.
	● Prove the properties of angles for a quadrilateral inscribed in a circle and construct inscribed and circumscribed circles of a triangle using geometric tools and geometric software.

Unit Objectives: *Students will know….*	Unit Objectives: *Students will be able to…...*
● Side ratios in right triangles are in properties of the angles in the triangle.	● use coordinates to prove geometric theorems including:
● Relationship between sine and cosine of complementary angles.	- prove or disprove that a given point lies on a circle of a given center and radius or point on the circle.
	● show and explain that definitions for trigonometric ratios derive from similarity of right triangles.

	● determine and compare sine and cosine ratios of complementary angles in a right triangle. ● solve right triangles (determine all angle measures and all side lengths) using trigonometric ratios and the Pythagorean Theorem

**Lower Cape May Regional School District HS Geometry Curriculum
Evidence of Learning**

Specific Formative Assessments Utilized in Daily Lessons:
- Warm ups
- Independent practice
- Oral questioning

Summative Assessment Utilized throughout Units:
- QBA's
- Benchmark 1 - Basics of Geometry
- Benchmark 2 - Bisectors, Medians, and Altitudes
- Benchmark 3 - Circles
- Benchmark 4 - Similarity
- Quizzes and Tests

Modifications for ELL's
Teacher tutoring
Peer tutoring
Cooperative Learning Groups
Modified Assignments
Differentiated Instruction
Response to Intervention (www.help4teachers.com)
Follow all IEP and 504 modifications

Special Education
Use of notes
Open book quiz
Re-test
Cooperative Learning Groups
Modified Assignments
Differentiated Instruction

504
Cooperative Learning Groups

Modified Assignments
Differentiated Instruction

Gifted and Talented
Cooperative Learning Groups
Modified Assignments
Differentiated Instruction

Teacher Notes:
● 	As required by the NJ Department of Education, teachers in all content areas will integrate the 21st Century Life and Careers Standards. As the NJDOE indicates, "Providing New Jersey students with the life and career skills needed to function optimally within this dynamic context is a critical focus and organizing principle of K-12 public education. New Jersey has both an obligation to prepare its young people to thrive in this environment, and a vested economic interest in grooming an engaged citizenry made up of productive members of a global workforce that rewards innovation, creativity, and adaptation to change." The links below indicate the CPIs for grade ranges and need to be addressed throughout the units of study:
	Life and Career Standards
● 	As indicated in the NJSLS, standards and interdisciplinary connections will be integrated throughout content area curriculum. Links to relevant content standards can be found below:
	http://www.corestandards.org/Math/

Project-based Learning Tasks:
● 	Several will be utilized throughout the curriculum - provided by Big Ideas curriculum, as well as original tasks created by the teacher

Vocabulary:
● 	In-text vocabulary should be incorporated into every unit. Word journals, vocabulary walls, and/or various other activities should be utilized by the instructor to teach vocabulary.

The Research Process:
● 	The research process must be integrated within each course curriculum. Student will be provided with opportunities to investigate issues from thematic units of study. As the NJSLS indicate, students will develop proficiency with MLA or APA format as applicable.

- Internet
- Textbook
- Media Center

Technology:
- Students must engage in technology applications integrated throughout the curriculum. Applicable technology utilized in this curricula are included below:
- Chromebooks
- Calculators

Resources:
- Ancillary resources and materials used to deliver instruction are included below:
- Practice worksheets

Curriculum development Resources/Instructional Materials:
List or Link Ancillary Resources and Curriculum Materials Here: ● Textbook ● Practice worksheets ● Quizzes ● Tests
Board of Education Approved Text(s)
● Big Ideas Math - Geometry