

Ocean Academy Charter School
Curriculum Guide
Grade 5 - Enrichment



Original Adoption:	August, 2025
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OCEAN ACADEMY CHARTER SCHOOL Enrichment Curriculum	
Content Area: Enrichment	
Course Title: Enrichment	
Grade Level: Five	
Unit Title	Pacing Guide in Days
Building Bridges: STEM	10 days (48 minutes per day; one day per week)
Independent Project	10 days (48 minutes per day; one day per week)
Inventions: Science/Math	10 days (48 minutes per day; one day per week)
Time Travel: ELA	10 days (48 minutes per day; one day per week)

OCEAN ACADEMY CHARTER SCHOOL Unit 1 Overview	
Content Area: Enrichment	
Unit Title: Unit 1 Building Bridges	Duration: 10 days
Target Course/Grade Level: Enrichment/Grade 5	
Introduction/Unit Focus:	
<p>In this hands-on engineering design unit, students will take on the role of structural engineers as they work collaboratively in teams to plan, design, and build model bridges. Using wooden toothpicks and other simple materials, students will respond to specific engineering</p>	

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challenges that mimic real-world constraints, including size limitations, material restrictions, and building codes.

Throughout the unit, students will investigate how different shapes, structures, and materials contribute to the strength, stability, and functionality of a bridge. They will explore basic concepts in physics, geometry, and engineering, and apply what they learn through experimentation and revision. Emphasis will be placed on the engineering design process, as students move through phases of brainstorming, blueprint creation, model construction, and testing.

Teams must ensure that their bridge designs meet required specifications to pass a final “inspection” simulating a real-world review process. This encourages careful planning, creative problem-solving, and attention to detail.

By the end of the unit, students will not only have developed a deeper understanding of the science and engineering behind bridge construction, but also gained valuable experience in collaboration, perseverance, and critical thinking.

Disciplinary Concepts for the Unit:

Standard 9.1 Personal Financial Literacy: This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

Standard 9.2 Career Awareness, Exploration, Preparation and Training. This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

Standard 9.4 Life Literacies and Key Skills. This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate

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place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

Diversity and Inclusion

C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

1. The instruction shall:
 - (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
 - (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
 - (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLs) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

“Twenty-first century themes and skills” means themes such as global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Focus Standards (Major Standards) <https://www.nj.gov/education/cccs>

RL.CR.5.1. Quote accurately from a literary text when explaining what the text says explicitly and make relevant connections when drawing inferences from the text.

RI.CR.5.1. Quote accurately from an informational text when explaining what the text says explicitly and make relevant connections when drawing inferences from the text.

W.AW.5.1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

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- A. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.
- B. Provide logically ordered reasons that are supported by facts and details from text(s), quote directly from text when appropriate.
- C. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).
- D. Provide a conclusion related to the opinion presented.

W.IW.5.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

- A. Introduce a topic clearly to provide a focus and group related information logically; include text features such as headings, illustrations, and multimedia when useful to aid in comprehension.
- B. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
- C. Link ideas within paragraphs and sections of information using words, phrases, and clauses (e.g., in contrast, especially).
- D. Use precise language and domain-specific vocabulary to inform about or explain the topic.
- E. Provide a conclusion related to the information of explanation presented.

W.WP.5.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

- A. Consider audience, purpose, and intent before writing.
- B. Plan appropriately to use specialized, topic-specific language appropriate for the audience, purpose and subject matter.
- C. Consider writing as a process, including self-evaluation, revision and editing.
- D. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, evaluate whether the writing achieved its goal and make changes in content or form as necessary.
- E. After initial drafting, expand, combine, and reduce sentences for meaning, audience, and style.

W.WR.5.5. Establish a central idea about a topic, investigation, issue or event and use several sources to support the proposed central idea.

W.SE.5.6. Gather relevant information from multiple valid and reliable print and digital sources; summarize or paraphrase information in notes and finished work, making note of any similarities and differences among ideas presented; and provide a list of sources.

W.RW.5.7. Write routinely over extended time frames (time for research and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

RI.PP.5.5. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent and how that may influence the reader's

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interpretation.	
5.OA.A.3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane	
5.NF.B.3. Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers	
New Jersey Student Learning Standards: Interdisciplinary Connections https://www.nj.gov/education/cccs	
ETS1: Engineering Design <ul style="list-style-type: none"> • ETS1.A: Defining and Delimiting Engineering Problems • ETS1.B: Developing Possible Solutions • ETS1.C: Optimizing the Design Solution 	
New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills	
Core Ideas	Performance Expectations (Identified with Standard Number and statement)
There is a broader economic system that influences your financial goals.	9.1.5.EG.3: Explain the impact of the economic system on one’s personal financial goals. 9.1.5. EG.4: Describe how an individual’s financial decisions affect society and contribute to the overall economy.
Spending choices and their intended and unintended consequences impact financial outcomes and personal wellbeing	9.1.5.FP.3: Analyze how spending choices and decision-making can result in positive or negative consequences. 9.1.5.FP.4: Explain the role of spending money and how it affects wellbeing and happiness (e.g., "happy money," experiences over things, donating to causes, anticipation, etc.).
There are specific steps associated with creating a budget.	9.1.5.PB.1: Develop a personal budget and explain how it reflects spending, saving, and charitable contributions.
Saving money can impact an individual’s ability to address emergencies and accomplish their short-and long-term goals.	9.1.5.PB.2: Describe choices consumers have with money (e.g., save, spend, donate).
New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)

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Data can be organized, displayed, and presented to highlight relationships.	8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim
Individuals can select, organize, and transform data into different visual representations and communicate insights gained from the data.	8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data. 8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim.
Engineering design is a systematic and creative process of communicating and collaborating to meet a design challenge. Often, several design solutions exist, each better in some way than the others.	8.2.5.ED.1: Explain the functions of a system and its subsystems. 8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models. 8.2.5.ED.3: Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task
Engineering design requirements include desired features and limitations that need to be considered.	8.2.5.ED.4: Explain factors that influence the development and function of products and systems (e.g., resources, criteria, desired features, constraints). 8.2.5.ED.5: Describe how specifications and limitations impact the engineering design process. 8.2.5.ED.6: Evaluate and test alternative solutions to a problem using the constraints and tradeoffs identified in the design process
New Jersey Student Learning Standards: Climate Change Mandate	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Collaboration with individuals with diverse perspectives can result in new ways of thinking and/or innovative solutions.	9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions. 9.4.5.CI.2: Investigate a persistent local or global issue, such as climate change, and collaborate with individuals with diverse perspectives to improve upon current actions designed to address the issue.

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Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

- Compare and classify different types of bridges such as suspension, beam, truss, and cantilever based on structure and function.
- Investigate how the use of specific shapes and materials can improve the strength and stability of a bridge.
- Design and construct a model bridge that meets given specifications and real-world challenges using the engineering design process.

Unit Enduring Understandings:

Students will know...

- The evolution of bridge engineering reflects human creativity, problem-solving, and technological advancement over time.
- Geometry, physics, and material science all play critical roles in the structural success of bridges.
- Bridges are not only functional structures but also iconic representations of culture, innovation, and identity within a community.

Unit Essential Questions:

- What makes a bridge both structurally sound and visually appealing?
- How do specific geometric shapes contribute to a bridge's strength and design?
- In what ways do engineers solve real-world problems when designing bridges?

Instructional Plan

Brief narrative of the progression of the unit with suggested activities--include a variety of instructional, supplemental and intervention materials that support student learners at all levels

- View video on the "Most Epic Bridge"- The Brooklyn Bridge
- Collaborate on "What Do You Know?" using a Google Jamboard
- Make observations about different types of bridges and their purpose
- Develop an understanding about different types of bridges by gathering facts using a variety of resources
- Begin the engineering process by completing "The Gumdrop Bridge Challenge"
- Using a variety of materials, i.e, toothpicks, glue, cardboard, etc. build a bridge that can withstand weight under given parameters

Evidence of Student Learning

Formative Assessments:

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- Participation/Observation during discussion, small group, conferencing and white board activities
- Verbal questioning
- Running Records
- Anecdotal Notes
- Learning/Response Logs/journals
- Graphic Organizers
- Peer/Self Assessments/rubrics
- Presentations
- Work samples
- Kinesthetic Assessments
- Graphic Organizers
- Hands on worksheets and assignments

Summative Assessments

- Writers Workshop / Conferencing
- Pre-test, test, and daily work
- Portfolio review
- Teacher made assessments

Benchmark Assessments:

- Oral Presentations
- Rubric assessments
- Portfolio assessments

Alternative Assessments

- Based on IEP or 504 as needed
- Portfolio Review

Performance Tasks:

- Teacher created activities/projects

Suggested Options for Differentiation

Special Education

- Follow all IEP modifications.
- Use visuals, graphic organizers, and outlines to support comprehension.
- Pre-teach and review key vocabulary and concepts.
- Provide small-group or one-on-one support.
- Assign peer tutors or collaborative partners.
- Offer preferential seating.
- Allow extra time for assignments and projects.
- Accept oral or dictated responses.
- Provide simplified or leveled resources as needed.
- Use adapted tools or communication devices for writing/drawing.

Students with 504 Plans

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- Follow the 504 plan.
 - Provide extended time for assignments and assessments.
 - Offer small-group or quiet working settings.
 - Provide preferential seating.
 - Accept oral or dictated responses.
 - Provide adapted tools, materials, or assistive technology.
-

Students at Risk of Failure

- Break down assignments into smaller, manageable steps.
 - Provide outlines, guided notes, or teacher-created study guides.
 - Pre-teach vocabulary and reinforce it with visuals.
 - Assign peer support or tutoring.
 - Provide preferential seating.
 - Offer frequent teacher feedback and check-ins.
 - Connect learning to real-life experiences to increase engagement.
-

Gifted and Talented

- Ask open-ended and higher-order questions (analyze, evaluate, create).
 - Provide opportunities for independent research or inquiry projects.
 - Encourage choice in projects, themes, and presentation formats.
 - Offer enrichment texts, primary sources, or multimedia materials.
 - Provide advanced organizers, puzzles, or design challenges.
 - Use flexible grouping for collaborative inquiry and problem-solving.
 - Incorporate enrichment centers, STEM/STEAM tasks, or simulations.
 - Encourage creative products such as journals, portfolios, or exhibits.
 - Allow leadership opportunities (peer teaching, leading group work).
 - Provide cross-curricular enrichment (link social studies, science, and ELA).
 - Include structured reflection through discussion, debriefs, or written responses.
-

Multilingual Learners

- Collaborate with ESL/MLL teachers.
- Provide visuals, realia, and labeled diagrams for new concepts.
- Pre-teach and revisit academic vocabulary.
- Offer bilingual glossaries or dictionaries when possible.
- Provide sentence frames for discussion and writing (e.g., “I discovered __,” “The evidence shows __”).

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- Scaffold writing with templates and graphic organizers.
 - Allow oral responses and extended time.
 - Use captioned videos or recorded directions.
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Diversity and Inclusion

- Highlight diverse cultural voices and contributions in projects.
- Provide alternative ways to demonstrate learning (art, oral presentations, digital projects).
- Use visuals, timelines, and clear, accessible language.
- Establish respectful norms for discussion and critique.
- Collaborate with cultural liaisons and support staff as needed.
- Provide sufficient wait time for student responses.
- Build family involvement into projects or cultural learning opportunities.

Supplemental Resources

- Teacher Computer with Internet connection
- Interactive Whiteboard
- Computer projector
- Calculators
- Manipulatives
- Teacher website/Google Classroom
- Student software access to MS© Word, Publisher, Powerpoint and Google Apps, Google Slides

Teacher Notes

**OCEAN ACADEMY CHARTER SCHOOL
Unit 2 Overview**

Content Area: Enrichment

Unit Title: Unit 2 Independent Project

Duration: 10 days

Target Course/Grade Level: Enrichment/Grade 5

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Introduction/Unit Focus:

In this inquiry-driven unit, students will engage in independent study projects that reflect their personal interests, curiosities, and academic strengths. With a focus on interdisciplinary learning, students will explore complex topics that connect multiple subject areas, such as science, social studies, language arts, and the arts while building essential research, planning, and presentation skills.

Guided by teacher support and feedback, students will take ownership of their learning as they select a meaningful topic, formulate research questions, gather and evaluate information from a variety of sources, and synthesize their findings into a cohesive project. Throughout the unit, students will be encouraged to think critically, solve problems creatively, and explore ideas in depth.

This unit emphasizes the development of self-directed learning skills, including time management, goal setting, organization, and reflection. Students will also have the opportunity to present their work in authentic ways, such as digital presentations, visual displays, or written reports sharing their findings with peers and potentially with broader audiences.

By the end of the unit, students will have a deeper understanding of their chosen topic, strengthened their ability to apply knowledge across disciplines, and gained confidence in their role as independent thinkers and learners.

Disciplinary Concepts for the Unit:

Standard 9.1 Personal Financial Literacy: This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

Standard 9.2 Career Awareness, Exploration, Preparation and Training. This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

Standard 9.4 Life Literacies and Key Skills. This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

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Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

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Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

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Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

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C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

2. The instruction shall:
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Focus Standards (Major Standards) <https://www.nj.gov/education/cccs>

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RL.CR.5.1. Quote accurately from a literary text when explaining what the text says explicitly and make relevant connections when drawing inferences from the text.

RL.IT.5.3. Analyze the impact of two or more individuals and events throughout the course of a text, comparing and contrasting two or more characters, settings, or events in a story or drama, drawing on specific textual evidence (e.g., how characters interact).

RI.AA.5.7. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).

W.WP.5.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

- A. Consider audience, purpose, and intent before writing.
- B. Plan appropriately to use specialized, topic-specific language appropriate for the audience, purpose and subject matter.
- C. Consider writing as a process, including self-evaluation, revision and editing.
- D. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, evaluate whether the writing achieved its goal and make changes in content or form as necessary.
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W.WR.5.5. Establish a central idea about a topic, investigation, issue or event and use several sources to support the proposed central idea.

W.SE.5.6. Gather relevant information from multiple valid and reliable print and digital sources; summarize or paraphrase information in notes and finished work, making note of any similarities and differences among ideas presented; and provide a list of sources.

New Jersey Student Learning Standards: Interdisciplinary Connections
<https://www.nj.gov/education/cccs>

ETS1: Engineering Design

- ETS1.A: Defining and Delimiting Engineering Problems
- ETS1.B: Developing Possible Solutions
- ETS1.C: Optimizing the Design Solution
- ETS2: Links Among Engineering, Technology, Science, and Society
- ETS2.A: Interdependence of Science, Engineering, and Technology
- ETS2.B: Influence of Engineering, Technology, and Science on Society and the Natural World

New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills

Core Ideas

Performance Expectations (Identified with Standard Number and statement)

You can give back in areas that matter to you

9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other

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	personal factors.
Individuals can choose to accept inevitable risk or take steps to protect themselves by avoiding or reducing risk	9.1.5.RMI.1: Identify risks that individuals and households face. 9.1.5.RMI.2: Justify reasons to have insurance.
An individual's passions, aptitude and skills can affect his/her employment and earning potential.	9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes. 9.2.5.CAP.2: Identify how you might like to earn an income. 9.2.5.CAP.3: Identify qualifications needed to pursue traditional and non-traditional careers and occupations. 9.2.5.CAP.4: Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements.
There are a variety of factors to consider before starting a business.	9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees. 9.2.5.CAP.7: Identify factors to consider before starting a business
Collaboration with individuals with diverse perspectives can result in new ways of thinking and/or innovative solutions	9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions 9.4.5.CI.2: Investigate a persistent local or global issue, such as climate change, and collaborate with individuals with diverse perspectives to improve upon current actions designed to address the issue
New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Computing devices may be connected to other devices to form a system as a way to extend their capabilities.	8.1.5.CS.1: Model how computing devices connect to other components to form a system.
Distinguishing between public and private information is important for	8.1.5.NI.2: Describe physical and digital security measures for protecting sensitive personal information.

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safe and secure online interactions. Information can be protected using various security measures (i.e., physical and digital).	
Data can be organized, displayed, and presented to highlight relationships.	8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim
Engineering design requirements include desired features and limitations that need to be considered	8.2.5.ED.4: Explain factors that influence the development and function of products and systems (e.g., resources, criteria, desired features, constraints). 8.2.5.ED.5: Describe how specifications and limitations impact the engineering design process. 8.2.5.ED.6: Evaluate and test alternative solutions to a problem using the constraints and tradeoffs identified in the design process
Technology innovation and improvement may be influenced by a variety of factors. Engineers create and modify technologies to meet people’s needs and wants; scientists ask questions about the natural world.	8.2.5.NT.1: Troubleshoot a product that has stopped working and brainstorm ideas to correct the problem. 8.2.5.NT.2: Identify new technologies resulting from the demands, values, and interests of individuals, businesses, industries, and societies. 8.2.5.NT.3: Redesign an existing product for a different purpose in a collaborative team. 8.2.5.NT.4: Identify how improvement in the understanding of materials science impacts technologies
Technological choices and opportunities vary due to factors such as differences in economic resources, location, and cultural values.	8.2.5.EC.1: Analyze how technology has contributed to or reduced inequities in local and global communities and determine its short- and long-term effects.
New Jersey Student Learning Standards: Climate Change Mandate	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)

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<p>The technology developed for the human designed world can have unintended consequences for the environment.</p> <p>Technology must be continually developed and made more efficient to reduce the need for non-renewable resources.</p>	<p>8.2.5.ETW.5: Identify the impact of a specific technology on the environment and determine what can be done to increase positive effects and to reduce any negative effects, such as climate change.</p>
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Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

- Develop a focused research question based on a personal interest or curiosity.
- Plan, manage, and carry out an independent project from start to finish.
- Organize and present findings using visual, written, and/or digital formats.
- Locate, evaluate, and synthesize information from multiple reliable sources.
- Reflect on the research process and revise their work based on feedback.

Unit Enduring Understandings:

Students will know...

- New discoveries can lead to deeper thinking and even shifts in perspective.
- Visuals are powerful tools for communication, interpretation, and persuasion.
- The way information is presented can shape how it is understood or received.
- Independent inquiry requires critical thinking, persistence, and adaptability.
- Accessing diverse sources of information strengthens the quality of learning.

Unit Essential Questions:

- In what ways can visual elements support or change how we understand information?
- How do researchers decide which sources of information are the most useful or credible?
- Why do people organize and present information in different ways?
- How can independent research lead to new understanding or creative solutions?
- What makes an idea worth exploring deeply?

Instructional Plan

Brief narrative of the progression of the unit with suggested activities--include a variety of instructional, supplemental and intervention materials that support student learners at all levels

- Brainstorm a topic of interest, plan, and implement a self-directed passion project.

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- Discover unique strengths, interests, and aspirations to build the skills needed for success in the K-12 classroom and beyond.
- Investigate and identify strengths with the use of a Word Cloud based on the survey used in www.thrively.com
- Analyze the characteristics and components of a Passion Project.
- Delineate those concepts of interest and decide which areas of interest are most prevalent
- Analyze passion projects of same age students
- Ask questions to make connections between interest and action
- Organize information to demonstrate knowledge

Evidence of Student Learning

Formative Assessments:

- Participation/Observation during discussion, small group, conferencing and white board activities
- Verbal questioning
- Running Records
- Anecdotal Notes
- Learning/Response Logs/journals
- Graphic Organizers
- Peer/Self Assessments/rubrics
- Presentations
- Work samples
- Kinesthetic Assessments
- Graphic Organizers
- Hands on worksheets and assignments

Summative Assessments

- Daily work
- Portfolio review
- Project Notebook

Benchmark Assessments:

- Oral Presentations
- Rubric assessments
- Portfolio assessments

Alternative Assessments

- Based on IEP or 504 as needed

Performance Tasks:

- Teacher made activities

Suggested Options for Differentiation

Special Education

- Follow all IEP modifications.
- Use visuals, graphic organizers, and outlines to support comprehension.

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- Pre-teach and review key vocabulary and concepts.
 - Provide small-group or one-on-one support.
 - Assign peer tutors or collaborative partners.
 - Offer preferential seating.
 - Allow extra time for assignments and projects.
 - Accept oral or dictated responses.
 - Provide simplified or leveled resources as needed.
 - Use adapted tools or communication devices for writing/drawing.
-

Students with 504 Plans

- Follow the 504 plan.
 - Provide extended time for assignments and assessments.
 - Offer small-group or quiet working settings.
 - Provide preferential seating.
 - Accept oral or dictated responses.
 - Provide adapted tools, materials, or assistive technology.
-

Students at Risk of Failure

- Break down assignments into smaller, manageable steps.
 - Provide outlines, guided notes, or teacher-created study guides.
 - Pre-teach vocabulary and reinforce with visuals.
 - Assign peer support or tutoring.
 - Provide preferential seating.
 - Offer frequent teacher feedback and check-ins.
 - Connect learning to real-life experiences to increase engagement.
-

Gifted and Talented

- Ask open-ended and higher-order questions (analyze, evaluate, create).
- Provide opportunities for independent research or inquiry projects.
- Encourage choice in projects, themes, and presentation formats.
- Offer enrichment texts, primary sources, or multimedia materials.
- Provide advanced organizers, puzzles, or design challenges.
- Use flexible grouping for collaborative inquiry and problem-solving.
- Incorporate enrichment centers, STEM/STEAM tasks, or simulations.
- Encourage creative products such as journals, portfolios, or exhibits.
- Allow leadership opportunities (peer teaching, leading group work).
- Provide cross-curricular enrichment (link social studies, science, and ELA).

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- Include structured reflection through discussion, debriefs, or written responses.
-

Multilingual Learners

- Collaborate with ESL/MLL teachers.
 - Provide visuals, realia, and labeled diagrams for new concepts.
 - Pre-teach and revisit academic vocabulary.
 - Offer bilingual glossaries or dictionaries when possible.
 - Provide sentence frames for discussion and writing (e.g., “I discovered __,” “The evidence shows __”).
 - Scaffold writing with templates and graphic organizers.
 - Allow oral responses and extended time.
 - Use captioned videos or recorded directions.
-

Diversity and Inclusion

- Highlight diverse cultural voices and contributions in projects.
- Provide alternative ways to demonstrate learning (art, oral presentations, digital projects).
- Use visuals, timelines, and clear, accessible language.
- Establish respectful norms for discussion and critique.
- Collaborate with cultural liaisons and support staff as needed.
- Provide sufficient wait time for student responses.
- Build family involvement into projects or cultural learning opportunities.

Supplemental Resources

- Teacher Computer with Internet connection
- Interactive Whiteboard
- Computer projector
- Calculators
- Manipulatives
- The ability to make a significant amount of copies/handouts for students
- Teacher website/Google Classroom
- Student software access to MS© Word, Publisher, Powerpoint and Google Apps
- General classroom supplies

Teacher Notes

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OCEAN ACADEMY CHARTER SCHOOL Unit 3 Overview	
Content Area: Enrichment	
Unit Title: Unit 3 Innovations & Technology	Duration: 10 days
Target Course/Grade Level: Enrichment/ Grade 5	
Introduction/Unit Focus: <p>In this problem-based learning unit, students will step into the role of inventors, innovators, and critical thinkers as they explore the fascinating world of inventions past, present, and future. Through historical analysis and hands-on discovery, students will examine how inventions have transformed everyday life, shaped societies, and addressed real-world challenges.</p> <p>Students will research and evaluate a wide range of inventions, identifying patterns in their development and the problems they were created to solve. They will compare and contrast the value, usefulness, and appeal of different inventions, considering how factors such as design, function, and cultural impact influence their success or failure. Students will also explore global databases and resources to gather information and uncover lesser-known inventions from around the world.</p> <p>Using this knowledge, students will identify a current problem or need and apply the principles of design thinking to develop an original invention or improve upon an existing one. They will move through the invention process, from brainstorming and sketching, to prototyping and presenting while reflecting on how creativity, collaboration, and resilience drive innovation.</p> <p>By the end of the unit, students will understand how inventors think, how inventions evolve, and how their own ideas can contribute to a better world.</p>	
Disciplinary Concepts for the Unit: <p>Standard 9.1 Personal Financial Literacy: This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.</p> <p>Standard 9.2 Career Awareness, Exploration, Preparation and Training. This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.</p>	

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Standard 9.4 Life Literacies and Key Skills. This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A:52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

Diversity and Inclusion

C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

3. The instruction shall:
 - (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
 - (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
 - (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLS) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

“Twenty-first century themes and skills” means themes such as global awareness; financial,

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economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Focus Standards (Major Standards) <https://www.nj.gov/education/cccs>

RI.CR.5.1. Quote accurately from an informational text when explaining what the text says explicitly and make relevant connections when drawing inferences from the text.
 RI.CI.5.2. Determine the central idea of an informational text and explain how it is supported by key details; summarize the text.
 RI.IT.5.3. Analyze the impact of two or more individuals and events throughout the course of a text, explaining the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific evidence in the text.

RI.AA.5.7. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
 RI.CT.5.8. Compare and contrast the authors’ approaches across two or more informational texts within the same genre or about texts on the same or similar topics.
 W.SE.5.6. Gather relevant information from multiple valid and reliable print and digital sources; summarize or paraphrase information in notes and finished work, making note of any similarities and differences among ideas presented; and provide a list of sources.

New Jersey Student Learning Standards: Interdisciplinary Connections <https://www.nj.gov/education/cccs>

6.1.5.GeoHE.1:
 Use a variety of sources from multiple perspectives, including aerial photographs or satellite images to describe how human activity has impacted the physical environment during different periods of time in New Jersey and the United States.

- 6.1.5.GeoHE.2: Cite examples of how technological advances have changed the environment in New Jersey and the United States (e.g., energy, transportation, communications).
- 6.1.5.GeoHE.3: Analyze the effects of catastrophic environmental and technological events on human settlements and migration

New Jersey Student Learning Standards: [Career Readiness, Life Literacies, and Key Skills](#)

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
You can give back in areas that matter to you	9.1.5.CR.1: Compare various ways to give back and relate them to your strengths, interests, and other personal factors.
An individual’s passions, aptitude and	9.2.5.CAP.1: Evaluate personal likes and dislikes and

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<p>skills can affect his/her employment and earning potential.</p>	<p>identify careers that might be suited to personal likes.</p> <p>9.2.5.CAP.2: Identify how you might like to earn an income.</p> <p>9.2.5.CAP.3: Identify qualifications needed to pursue traditional and non-traditional careers and occupations.</p> <p>9.2.5.CAP.4: Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements</p>
<p>Individuals can choose to accept inevitable risk or take steps to protect themselves by avoiding or reducing risk.</p>	<p>9.2.5.CAP.8: Identify risks that individuals and households face.</p>
<p>Collaboration with individuals with diverse perspectives can result in new ways of thinking and/or innovative solutions.</p>	<p>9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions (e.g., W.4.6, 3.MD.B.3,7.1.NM.IPERS.6).</p> <p>9.4.5.CI.2: Investigate a persistent local or global issue, such as climate change, and collaborate with individuals with diverse perspectives to improve upon current actions designed to address the issue (e.g., 6.3.5.CivicsPD.3, W.5.7).</p>
<p>Curiosity and a willingness to try new ideas (intellectual risk-taking) contributes to the development of creativity and innovation skills.</p>	<p>9.4.5.CI.3: Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity (e.g., 8.2.5.ED.2, 1.5.5.CR1a).</p> <p>9.4.5.CI.4: Research the development process of a product and identify the role of failure as a part of the creative process</p>
<p>The ability to solve problems effectively begins with gathering data, seeking resources, and applying critical thinking skills.</p>	<p>9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).</p> <p>9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g.,</p>

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	<p>2.1.5.CHSS.1, 4-ESS3-1).</p> <p>9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.</p> <p>9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).</p>
<p>New Jersey Student Learning Standards: Computer Science and Design Thinking</p>	
<p>Core Ideas</p>	<p>Performance Expectations (Identified with Standard Number and Statement)</p>
Data can be organized, displayed, and presented to highlight relationships.	8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim.
Individuals can select, organize, and transform data into different visual representations and communicate insights gained from the data.	<p>8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.</p> <p>8.1.5.DA.4: Organize and present climate change data visually to highlight relationships or support a claim</p>
Individuals develop programs using an iterative process involving design, implementation, testing, and review	8.1.5.AP.6: Develop programs using an iterative process, implement the program design, and test the program to ensure it works as intended.
Engineering design is a systematic and creative process of communicating and collaborating to meet a design challenge. Often, several design solutions exist, each better	<p>8.2.5.ED.2: Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.</p> <p>8.2.5.ED.3: Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.</p>
Engineering design requirements include desired features and limitations that need to be considered.	<p>8.2.5.ED.5: Describe how specifications and limitations impact the engineering design process.</p> <p>8.2.5.ED.6: Evaluate and test alternative solutions to a problem using the constraints and tradeoffs identified in the design process</p>
<p>New Jersey Student Learning Standards: Climate Change Mandate</p>	
<p>Core Ideas</p>	<p>Performance Expectations (Identified with Standard Number and Statement)</p>
Presentational communication mode involves presenting information,	7.1.NM.PRSNT.6: Name and label tangible cultural products associated with climate change in the

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concepts, and ideas to an audience of listeners or readers on a variety of topics.

target language regions of the world.

Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

- Develop an original invention that addresses a real-world need or problem.
- Use online global databases to locate and extract relevant information about historical and modern inventions.
- Identify patterns and relationships among inventions across time periods and cultures.
- Evaluate the practicality, innovation, and appeal of various inventions.
- Trace the evolution of selected inventions and describe how they have been improved over time.
- Analyze and compare the impact of different inventions on daily life.
- Explain the steps in the invention process, from idea generation to solution design.

Unit Enduring Understandings:

Students will know...

- Invention is driven by curiosity, creativity, and the desire to solve problems.
- Inventions have a powerful and lasting influence on how we live, work, and communicate.
- Many inventions are connected through shared ideas, building upon previous innovations.
- The process of inventing involves experimentation, revision, and persistence.
- Human progress often depends on the willingness to question existing solutions and imagine new ones.

Unit Essential Questions:

- How do inventors turn ideas into real solutions?
- In what ways do inventions evolve to meet changing needs?
- Why are some inventions more impactful or successful than others?
- How do invention and innovation shape the way we live today?
- What inspires someone to invent something new?

Instructional Plan

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Brief narrative of the progression of the unit with suggested activities--includes a variety of instructional, supplemental and intervention materials that support student learners at all levels

- Introduce inventions that have been discovered by accident.
- Explain what an invention is and why it is important to invent.
- Create a timeline of inventions--student choice
- Begin the design process with an invention of their own
- Keep a log of details about the process
- Improve invention
- Demonstrate and describe the invention

Evidence of Student Learning

Formative Assessments:

- Participation/Observation during discussion, small group, conferencing and white board activities
- Verbal questioning
- Running Records
- Anecdotal Notes
- Learning/Response Logs/journals
- Graphic Organizers
- Peer/Self Assessments/rubrics
- Presentations
- Work samples
- Kinesthetic Assessments
- Graphic Organizers
- Hands on worksheets and assignments

Summative Assessments

- Conferencing
- Daily work
- Portfolio review
- Teacher made assessments

Benchmark Assessments:

- Oral Presentations
- Rubric assessments
- Portfolio assessments

Alternative Assessments

- Based on IEP or 504 as needed

Performance Tasks:

- Teacher made activities

Suggested Options for Differentiation

Special Education

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- Follow all IEP modifications.
 - Use visuals, graphic organizers, and outlines to support comprehension.
 - Pre-teach and review key vocabulary and concepts.
 - Provide small-group or one-on-one support.
 - Assign peer tutors or collaborative partners.
 - Offer preferential seating.
 - Allow extra time for assignments and projects.
 - Accept oral or dictated responses.
 - Provide simplified or leveled resources as needed.
 - Use adapted tools or communication devices for writing/drawing.
-

Students with 504 Plans

- Follow the 504 plan.
 - Provide extended time for assignments and assessments.
 - Offer small-group or quiet working settings.
 - Provide preferential seating.
 - Accept oral or dictated responses.
 - Provide adapted tools, materials, or assistive technology.
-

Students at Risk of Failure

- Break down assignments into smaller, manageable steps.
 - Provide outlines, guided notes, or teacher-created study guides.
 - Pre-teach vocabulary and reinforce with visuals.
 - Assign peer support or tutoring.
 - Provide preferential seating.
 - Offer frequent teacher feedback and check-ins.
 - Connect learning to real-life experiences to increase engagement.
-

Gifted and Talented

- Ask open-ended and higher-order questions (analyze, evaluate, create).
- Provide opportunities for independent research or inquiry projects.
- Encourage choice in projects, themes, and presentation formats.
- Offer enrichment texts, primary sources, or multimedia materials.
- Provide advanced organizers, puzzles, or design challenges.
- Use flexible grouping for collaborative inquiry and problem-solving.
- Incorporate enrichment centers, STEM/STEAM tasks, or simulations.

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- Encourage creative products such as journals, portfolios, or exhibits.
 - Allow leadership opportunities (peer teaching, leading group work).
 - Provide cross-curricular enrichment (link social studies, science, and ELA).
 - Include structured reflection through discussion, debriefs, or written responses.
-

Multilingual Learners

- Collaborate with ESL/MLL teachers.
 - Provide visuals, realia, and labeled diagrams for new concepts.
 - Pre-teach and revisit academic vocabulary.
 - Offer bilingual glossaries or dictionaries when possible.
 - Provide sentence frames for discussion and writing (e.g., “I discovered ____,” “The evidence shows ____”).
 - Scaffold writing with templates and graphic organizers.
 - Allow oral responses and extended time.
 - Use captioned videos or recorded directions.
-

Diversity and Inclusion

- Highlight diverse cultural voices and contributions in projects.
- Provide alternative ways to demonstrate learning (art, oral presentations, digital projects).
- Use visuals, timelines, and clear, accessible language.
- Establish respectful norms for discussion and critique.
- Collaborate with cultural liaisons and support staff as needed.
- Provide sufficient wait time for student responses.
- Build family involvement into projects or cultural learning opportunities.

Supplemental Resources

- Teacher Computer with Internet connection
- Interactive Whiteboard
- Computer projector
- Calculators
- Manipulatives
- The ability to make a significant amount of copies/handouts for students
- Teacher website/Google Classroom
- Student software access to MS© Word, Publisher, Powerpoint and Google Apps

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Teacher Notes

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OCEAN ACADEMY CHARTER SCHOOL
Unit 4 Overview

Content Area: Enrichment

Unit Title: Unit 4 Time Travel

Duration: 10 days

Target Course/Grade Level: Enrichment/Grade 5

Introduction/Unit Focus:

In this engaging and student-centered unit, learners will step back in time to explore a specific year of their choosing from the past. Through focused research, students will investigate a variety of cultural, technological, and social topics such as automobiles, music, television, movies, fashion, and more to gain a rich understanding of that year's unique characteristics. They will analyze how these elements compare and contrast with those of the modern day, developing critical thinking skills by recognizing patterns of change and continuity over time.

Students will also deepen their ability to gather, organize, and synthesize information from diverse sources. To communicate their discoveries creatively and effectively, each student will select a medium that best showcases their findings, whether through storytelling, multimedia presentations, virtual museum exhibits, websites, or digital slideshows. This project will encourage both independent exploration and the development of digital literacy skills, fostering a meaningful connection between history and students' own experiences.

By immersing themselves in a year from the past, students will cultivate a deeper appreciation for historical context and how innovation, culture, and society evolve through time.

Disciplinary Concepts for the Unit:

Standard 9.1 Personal Financial Literacy: This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

Standard 9.2 Career Awareness, Exploration, Preparation and Training. This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

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Standard 9.4 Life Literacies and Key Skills. This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

Diversity and Inclusion

C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

4. The instruction shall:

- (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
- (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
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Asian Americans and Pacific Islanders (AAPI)

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21st Century Themes and Skills

“Twenty-first century themes and skills” means themes such as global awareness; financial,

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economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Focus Standards (Major Standards) <https://www.nj.gov/education/cccs>

RL.CR.5.1. Quote accurately from a literary text when explaining what the text says explicitly and make relevant connections when drawing inferences from the text.

RI.CR.5.1. Quote accurately from an informational text when explaining what the text says explicitly and make relevant connections when drawing inferences from the text.

W.AW.5.1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

- E. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer’s purpose.
- F. Provide logically ordered reasons that are supported by facts and details from text(s), quote directly from text when appropriate.
- G. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).
- H. Provide a conclusion related to the opinion presented.

W.IW.5.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

- F. Introduce a topic clearly to provide a focus and group related information logically; include text features such as headings, illustrations, and multimedia when useful to aid in comprehension.
- G. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
- H. Link ideas within paragraphs and sections of information using words, phrases, and clauses (e.g., in contrast, especially).
- I. Use precise language and domain-specific vocabulary to inform about or explain the topic.
- J. Provide a conclusion related to the information of explanation presented.

W.WP.5.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

- F. Consider audience, purpose, and intent before writing.
- G. Plan appropriately to use specialized, topic-specific language appropriate for the audience, purpose and subject matter.
- H. Consider writing as a process, including self-evaluation, revision and editing.
- I. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, evaluate whether the writing achieved its goal and make changes in content or form as necessary.

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J. After initial drafting, expand, combine, and reduce sentences for meaning, audience, and style.

W.WR.5.5. Establish a central idea about a topic, investigation, issue or event and use several sources to support the proposed central idea.

W.SE.5.6. Gather relevant information from multiple valid and reliable print and digital sources; summarize or paraphrase information in notes and finished work, making note of any similarities and differences among ideas presented; and provide a list of sources.

W.RW.5.7. Write routinely over extended time frames (time for research and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

RI.PP.5.5. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent and how that may influence the reader’s interpretation.

New Jersey Student Learning Standards: Interdisciplinary Connections
<https://www.nj.gov/education/cccs>

- 5.M.B.2 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
- a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.
 - b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.

5.G.A.2
Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation

New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
Income and benefits can vary depending on the employer and type of job or career.	9.2.5.CAP.5: Identify various employee benefits, including income, medical, vacation time, and lifestyle benefits provided by different types of jobs and careers.
Individuals can choose to accept inevitable risk or take steps to protect themselves by avoiding or reducing risk.	9.2.5.CAP.8: Identify risks that individuals and households face.
Collaboration with individuals with diverse perspectives can result in new ways of thinking and/or	9.4.5.CI.1: Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and

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innovative solutions.	deliberate about possible solutions 9.4.5.CI.2: Investigate a persistent local or global issue, such as climate change, and collaborate with individuals with diverse perspectives to improve upon current actions designed to address the issue
Curiosity and a willingness to try new ideas (intellectual risk-taking) contributes to the development of creativity and innovation skills	9.4.5.CI.3: Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity 9.4.5.CI.4: Research the development process of a product and identify the role of failure as a part of the creative process
The ability to solve problems effectively begins with gathering data, seeking resources, and applying critical thinking skills.	9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global
Culture and geography can shape an individual's experiences and perspectives	9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view
<u>New Jersey Student Learning Standards: Computer Science and Design Thinking</u>	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
The development and modification of computing technology is driven by individual's needs and wants and can affect individuals differently	8.1.5.IC.1: Identify computing technologies that have impacted how individuals live and work and describe the factors that influenced the changes.
Engineering design requirements include desired features and limitations that need to be considered.	8.2.5.ED.4: Explain factors that influence the development and function of products and systems (e.g., resources, criteria, desired features, constraints). 8.2.5.ED.5: Describe how specifications and limitations impact the engineering design process. 8.2.5.ED.6: Evaluate and test alternative solutions to a problem using the constraints and tradeoffs identified in the design process
Societal needs and wants determine which new tools are developed to address real-world problems.	8.2.5.ITH.1: Explain how societal needs and wants influence the development and function of a product and a system

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New Jersey Student Learning Standards: Climate Change Mandate	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Interactions between humans has led to the spread of cultural practices, artifacts, languages, diseases, and other positive and negative attributes as well as changes in environmental characteristics.	6.1.5.GeoGl.4: Explain how cultural and environmental characteristics affect the distribution and movement of people, goods and ideas.

Knowledge and Skills

Unit Learning Targets (Objectives):

Students will be able to...

- Gather and evaluate information from diverse sources, including print materials, websites, and multimedia.
- Identify similarities and differences between a selected historical year and the present day across various cultural and technological areas.
- Use digital tools such as Google Slides, Microsoft PowerPoint, or Windows Movie Maker to create and share a polished multimedia presentation.
- Organize research findings clearly and effectively for peer presentations.

Unit Enduring Understandings:

Students will know...

- Effective research requires using multiple types of resources to gain a well-rounded perspective.
- Comparing past and present allows us to recognize patterns of change and continuity in society and culture.

Unit Essential Questions:

- What are the best ways to organize and share information about historical and modern topics?
- How can exploring the past help us better understand the present and anticipate the future?

Instructional Plan

Brief narrative of the progression of the unit with suggested activities--include a variety of instructional, supplemental and intervention materials that support student learners at all levels

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- Investigate the concept of time and the passage of time.
- Explore if time travel is possible by explaining the wormhole.
- Research various aspects of American culture and politics of a self-chosen decade
- Choose from a variety of presentation ideas to display research.

Evidence of Student Learning

Formative Assessments:

- Participation/Observation during discussion, small group, conferencing and white board activities
- Verbal questioning
- Running Records
- Anecdotal Notes
- Learning/Response Logs/journals
- Graphic Organizers
- Peer/Self Assessments/rubrics
- Presentations
- Work samples
- Kinesthetic Assessments
- Graphic Organizers
- Hands on worksheets and assignments

Summative Assessments

- Writers Workshop / Conferencing
- Pre-test, test, and daily work
- Portfolio review
- Teacher made assessments

Benchmark Assessments:

- Oral Presentations
- Rubric assessments
- Portfolio assessments

Alternative Assessments

- Based on IEP or 504 as needed

Performance Tasks:

- Teacher made activities

Suggested Options for Differentiation

Special Education

- Follow all IEP modifications.
- Use visuals, graphic organizers, and outlines to support comprehension.
- Pre-teach and review key vocabulary and concepts.
- Provide small-group or one-on-one support.
- Assign peer tutors or collaborative partners.
- Offer preferential seating.
- Allow extra time for assignments and projects.

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- Accept oral or dictated responses.
 - Provide simplified or leveled resources as needed.
 - Use adapted tools or communication devices for writing/drawing.
-

Students with 504 Plans

- Follow the 504 plan.
 - Provide extended time for assignments and assessments.
 - Offer small-group or quiet working settings.
 - Provide preferential seating.
 - Accept oral or dictated responses.
 - Provide adapted tools, materials, or assistive technology.
-

Students at Risk of Failure

- Break down assignments into smaller, manageable steps.
 - Provide outlines, guided notes, or teacher-created study guides.
 - Pre-teach vocabulary and reinforce with visuals.
 - Assign peer support or tutoring.
 - Provide preferential seating.
 - Offer frequent teacher feedback and check-ins.
 - Connect learning to real-life experiences to increase engagement.
-

Gifted and Talented

- Ask open-ended and higher-order questions (analyze, evaluate, create).
 - Provide opportunities for independent research or inquiry projects.
 - Encourage choice in projects, themes, and presentation formats.
 - Offer enrichment texts, primary sources, or multimedia materials.
 - Provide advanced organizers, puzzles, or design challenges.
 - Use flexible grouping for collaborative inquiry and problem-solving.
 - Incorporate enrichment centers, STEM/STEAM tasks, or simulations.
 - Encourage creative products such as journals, portfolios, or exhibits.
 - Allow leadership opportunities (peer teaching, leading group work).
 - Provide cross-curricular enrichment (link social studies, science, and ELA).
 - Include structured reflection through discussion, debriefs, or written responses.
-

Multilingual Learners

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- Collaborate with ESL/MLL teachers.
 - Provide visuals, realia, and labeled diagrams for new concepts.
 - Pre-teach and revisit academic vocabulary.
 - Offer bilingual glossaries or dictionaries when possible.
 - Provide sentence frames for discussion and writing (e.g., “I discovered __,” “The evidence shows __”).
 - Scaffold writing with templates and graphic organizers.
 - Allow oral responses and extended time.
 - Use captioned videos or recorded directions.
-

Diversity and Inclusion

- Highlight diverse cultural voices and contributions in projects.
- Provide alternative ways to demonstrate learning (art, oral presentations, digital projects).
- Use visuals, timelines, and clear, accessible language.
- Establish respectful norms for discussion and critique.
- Collaborate with cultural liaisons and support staff as needed.
- Provide sufficient wait time for student responses.
- Build family involvement into projects or cultural learning opportunities.

Supplemental Resources

- Teacher Computer with Internet connection
- Interactive Whiteboard
- Computer projector
- Calculators
- Manipulatives
- The ability to make a significant amount of copies/handouts for students
- Teacher website/Google Classroom
- Student software access to MS© Word, Publisher, Powerpoint and Google Apps

Teacher Notes