Ocean Academy Charter School
Curriculum Guide
Grade 3 - Enrichment

Original Adoption:	August 2025
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OCEAN ACADEMY CHARTER SCHOOL **Enrichment Curriculum**	
Content Area: Enrichment	
Course Title: Enrichment	
Grade Level: 3	
Unit Title	**Pacing Guide in Days**
Game Design: STEM/ELA/Math	8 days (48 minutes per day; one day per week)
Landforms: New Planet Discovered STEM/ELA	8 days (48 minutes per day; one day per week)
Independent Project STEM	8 days (48 minutes per day; one day per week)
Aerodynamics: Paper Airplanes STEM/ELA/Math	8 days (48 minutes per day; one day per week)
Digital Storytelling through Stop Motion Animation: STEM	8 days (48 minutes per day; one day per week)

OCEAN ACADEMY CHARTER SCHOOL **Unit 1 Overview**	
Content Area: Enrichment	
Unit Title: Unit 1 Game Design	**Duration:** 8 days
Target Course/Grade Level: Enrichment/ Grade 3	

Ocean Academy Charter School
Curriculum Guide
Grade 3 - Enrichment

Introduction/Unit Focus:

In this project-based unit, students will step into the role of game designers as they work together to plan, create, and build their own original board games. Through this process, students will strengthen important skills such as time management, organization, collaboration, and creative problem-solving.

Students will apply knowledge from multiple subject areas, including reading, math, social studies, and science to develop a game that is both fun to play and meaningful in content. They will explore game elements such as rules, objectives, challenges, and design features, learning how each part contributes to a successful player experience.

As they work in teams, students will practice sharing ideas, giving and receiving constructive feedback, making decisions together, and staying on task to meet deadlines. The unit emphasizes planning and perseverance, allowing students to take ownership of their learning and see a creative project through from beginning to end.

By the conclusion of the unit, students will have created fully developed board games that can be shared and played with others. Along the way, they'll grow as communicators, collaborators, and innovators, skills essential for both academic success and real-world problem-solving.

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 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

Content Standards: New Jersey Student Learning Standards

RI.CR.3.1. Ask and answer questions and make relevant connections to demonstrate understanding of an informational text, referring explicitly to textual evidence as the basis for the answers.
RI.CI.3.2. Recount in oral and written form the key details from a multi-paragraph

informational text and explain how they support the main idea. RI.IT.3.3. Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
RL.CR.3.1. Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers.
W.WR.3.5. Generate questions about a topic and independently locate related information from at least two reference sources (print and non-print) to obtain information on that topic.
W.WP.3.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. A. Identify audience, purpose, and intended length of composition before writing. B. Consider writing as a process, including self-evaluation, revision and editing. C. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, find and correct errors and improve word choice.
New Jersey Student Learning Standards: Interdisciplinary Connections **https://www.nj.gov/education/cccs**
Operations and Algebraic Thinking 3.O D. Solve problems involving the four operations, and identify and explain patterns in arithmetic. 8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.3 9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.
Measurement and Data 3.M A. Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects 1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills

Core Ideas	**Performance Expectations (Identified with Standard Number and statement)**
External factors can influence the items that an individual wants or needs	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.).
New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
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 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)**
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.

Knowledge and Skills
Unit Learning Targets (Objectives): *Students will be able to…*

- Identify patterns and shared features among different types of games.
- Explore how games have developed over time and explain their purpose and appeal.
- Compare and contrast the purpose, design, and enjoyment value of various games.
- Conduct interviews to gather opinions about favorite games and represent the results in a graph.
- Analyze and evaluate popular games to discover what makes them engaging or successful.
- Design and build an original board game by following specific design guidelines and incorporating key game elements.

Unit Enduring Understandings:
Students will know…

- All games share certain elements, but creative choices make each game unique and enjoyable in different ways.
- Games are made up of systems and rules that influence how players interact and solve problems.
- Designing games helps develop important skills such as critical thinking, creativity, collaboration, and empathy.
- Game creation involves experimenting, testing, and refining ideas based on feedback.
- Game design encourages flexible thinking and innovation, skills that can be used in many areas of life.

Unit Essential Questions:

- What features or elements do most games have in common?
- How can we sort and group games based on how they are played or what they teach?
- What makes a game interesting, fun, or successful?
- How can designing a game help us become better thinkers, problem solvers, and collaborators?

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

- Introduction of Game Design
- Review American Board and Card Game History
- Investigate Games Through the Years
- Design a board game with the following elements:
    - directions sheet
    - prototype pieces
    - design and packaging

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
- Daily 5 activities
- Sight word assessments
- Fundations monitoring
- Graphic Organizers
- Hands on worksheets and assignments

Summative Assessments

- Writers Workshop / Conferencing
- Pre-test, test, and daily work
- Portfolio review
- Reading Assessment/Running Records
- Fundations End-of-unit tests
- Teacher made assessments

Benchmark Assessments:

- Oral Presentations
- Rubric assessments
- Portfolio assessments

Alternative Assessments

- Based on IEP or 504 as needed
- Retest on Unit Fundations Assessment if the students scores under 80%

Performance Tasks: This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit.

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

- 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

- 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 w/ Internet connection
- Calculators
- Manipulatives
- Copies of handouts/worksheets for each student
- Teacher website
- Microsoft Office, Google Apps, StoryBoard That
- General Classroom Supply

Teacher Notes

Unit 2 Overview	
Content Area: Enrichment	
Unit Title: Unit 2 Landforms/New Planet	**Duration:** 8 days
Target Course/Grade Level: Enrichment/ Grade 3	

Introduction/Unit Focus:

In this unit, students will become young geographers as they explore the physical features that shape our Earth. Through maps, models, images, and hands-on investigations, students will learn to identify and describe major landforms and bodies of water, such as mountains, valleys, plains, rivers, and oceans. They will build a strong understanding of key geography terms and use them to accurately describe and compare natural features around the world.

Students will also develop visual recognition skills by examining real-world photos, satellite images, and digital tools like Google Earth. They will investigate how landforms are created by natural forces such as wind, water, and tectonic movement. Along the way, they'll make connections between geography and how people live, understanding how physical features influence settlement, weather, transportation, and culture.

This unit challenges students to think spatially, ask meaningful questions about Earth's surface, and communicate their discoveries using maps, models, diagrams, and writing. It supports critical thinking, observation, and an appreciation for the dynamic nature of our planet.

Disciplinary Concepts for the Unit:

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RL.CR.3.1. Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers.

W.WR.3.5. Generate questions about a topic and independently locate related information from at least two reference sources (print and non-print) to obtain information on that topic.

W.WP.3.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

D. Identify audience, purpose, and intended length of composition before writing.
E. Consider writing as a process, including self-evaluation, revision and editing.
F. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, find and correct errors and improve word choice.

W.AW.3.1. Write opinion texts to present an idea with reasons and information.

A. Introduce an opinion clearly.
B. Support the opinion with facts, definitions, reasons text evidence, or other information and examples related to the topic.
C. Link ideas within sections of information using transition words and phrases (e.g., then, because, also, therefore, since, for example) to connect opinion and reasons.
D. Provide a conclusion related to the opinion presented.

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

SL.PE.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

A. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.
B. Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
C. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
D. Explain their own ideas and understanding in light of the discussion.
B. Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).

C. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. D. Explain their own ideas and understanding in light of the discussion.	
SL.UM.3.5. Use multimedia to demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.	
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.
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 solution
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
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
New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
The technology developed for the human designed world can have unintended consequences for the environment. Technology must be continually developed and made more efficient to reduce the need for non-renewable resources	8.2.5.ETW.1: Describe how resources such as material, energy, information, time, tools, people, and capital are used in products or systems. 8.2.5.ETW.2: Describe ways that various technologies are used to reduce improper use of resources.
New Jersey Student Learning Standards: Climate Change Mandate	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
Populations live in a variety of habitats and change in those habitats affects the organisms	3-LS4-4: Make a claim about the merit of a solution to a problem caused when the

living there. When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die.	environment changes and the types of plants and animals that live there may change.

Knowledge and Skills

Unit Learning Targets (Objectives):
Students will be able to…

- Use visual cues to recognize and name common landforms such as mountains, valleys, plateaus, and plains.
- Describe and compare at least five different landforms using accurate geographic vocabulary.
- Sketch a variety of landforms and label their main features.
- Define and use key vocabulary related to geography and landforms in both discussion and written work.
- Work in a small group to ask questions, share observations, and build on new geographic knowledge through collaboration.
- Identify and locate U.S. regions where specific landforms are commonly found using a map.
- Predict how natural processes like erosion and weathering might shape or change a landform over time.
- Create a three-dimensional model of a landform, including accurate features and descriptive labels.
- Compare and contrast the characteristics of two or more landforms, discussing similarities and differences.
- Construct a 3D landform display and present key information to the class in a short oral report.
- Explain the cause-and-effect relationship between natural forces (like water, wind, and ice) and changes in the Earth's surface.
- Analyze visual data to determine which factors influence landform formation and change.

Unit Enduring Understandings:
Students will know…

- The surface of the Earth is made up of a variety of landforms and bodies of water that shape the world around us.

- Landforms are created and changed over time by natural processes such as weathering, erosion, and movement of the Earth's crust.
- Geography helps us understand not only where things are, but also how people interact with their physical environment.
- Every region of the world is unique because of its combination of natural features and physical geography.
- Recognizing and understanding landforms allows us to make connections between nature, people, and place.

Unit Essential Questions:

- What natural forces shape the landforms we see on Earth today?
- In what ways are different landforms similar or different from one another?
- How can we identify landforms on a map or in the real world?
- What types of landforms are found in different regions of the United States?
- How do weathering and erosion change landforms over time?
- Why is it important to understand landforms and how they form?

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

- Research and create a portfolio of illustrations of landforms
- Investigate five landforms of choice
- Define and give examples using a flipbook
- Draw a fictitious map labeling the landforms
- Create a 3D model of their "new planet."
- Design a catalog of information to report back

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
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- 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
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Alternative Assessments
- Based on IEP or 504 as needed

Performance Tasks: This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit.

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

- ➢ Follow the 504 plan.
- ➢ Provide extended time for assignments and assessments.
- ➢ Offer small-group or quiet working settings.
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Students at Risk of Failure

- Break down assignments into smaller, manageable steps.
- Provide outlines, guided notes, or teacher-created study guides.
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Gifted and Talented

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- 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 ___”).
- 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 w/ Internet connection
- Calculators
- Manipulatives
- Copies of handouts/worksheets for each student
- Teacher website
- Microsoft Office, Google Apps, StoryBoard That
- General Classroom Supply

Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL
Unit 3 Overview

Content Area: Enrichment

Unit Title: Unit 3 Independent Project	**Duration:** 8 days

Target Course/Grade Level: Enrichment/ Grade 3

Introduction/Unit Focus:

In this independent project-based unit, students will take charge of their own learning by exploring topics they are passionate about through an interdisciplinary lens. With support and guidance from their teacher, students will choose a topic of interest and develop a meaningful project that draws on knowledge and skills from multiple subject areas, such as reading, writing, science, social studies, math, and the arts.

As they dive into their chosen topics, students will be encouraged to ask big questions, seek out reliable sources, and make connections between ideas across different disciplines. They will expand their "funds of knowledge," the unique experiences and understandings they bring to learning, and use this foundation to build new insights and perspectives.

Throughout the process, students will plan, research, organize, and create. They will learn how to manage their time, make decisions about how to share their learning, and revise their work based on feedback. Opportunities for hands-on investigations, creative expression, and authentic presentation will help students develop confidence and pride in their work.

By the end of the unit, students will have created a final project that demonstrates deep understanding of their topic, strong thinking and communication skills, and the ability to apply what they've learned in meaningful, real-world ways.

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 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.3.1. Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers.

W.WP.3.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
A. Identify audience, purpose, and intended length of composition before writing.
B. Consider writing as a process, including self-evaluation, revision and editing.
With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, find and correct errors and improve word choice.

W.WR.3.5. Generate questions about a topic and independently locate related information from at least two reference sources (print and non-print) to obtain information on that topic.

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

SL.PE.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups,

and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. A. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. B. Follow agreed-upon norms for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). C. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. D. Explain their own ideas and understanding in light of the discussion.
SL.UM.3.5. Use multimedia to demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.
W.RW.3.7. Engage in independent and task-based writing for both short and extended periods of time, producing written work routinely.

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.
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 safe and secure online interactions. Information can be protected using various security measures (i.e., physical and digital).	8.1.5.NI.2: Describe physical and digital security measures for protecting sensitive personal information.
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)**
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.

Knowledge and Skills

Unit Learning Targets (Objectives):
Students will be able to…

- Generate a personal area of interest and develop guiding questions to explore the topic in depth.
- Create a step-by-step plan for an independent project, adjusting it as needed throughout the process.
- Conduct research using a variety of reliable sources, including books, websites, and multimedia tools.
- Organize gathered information clearly using visuals, outlines, or graphic organizers.
- Analyze visual materials (e.g., photos, charts, diagrams, infographics) to gain deeper understanding of the topic.
- Present their findings in a creative and meaningful way using both written and visual formats.
- Reflect on the learning process and evaluate how their understanding has grown.

Unit Enduring Understandings:
Students will know…

- Information can be discovered, gathered, and interpreted in many different forms.
- Visual elements help communicate ideas clearly and can strengthen understanding.
- The way information is organized influences how we learn and remember it.

Unit Essential Questions:

- How do we choose a topic and organize our thinking when exploring a big idea?
- In what ways do visuals help us understand complex information?
- Why is it important to look at different types of sources when learning something new?
- How can the way information is presented influence what we believe or feel?
- What strategies help us make sense of visual and written information?

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.
- 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

- 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: This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit.

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

- 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 ___").
- 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

OCEAN ACADEMY CHARTER SCHOOL Unit 4 Overview	
Content Area: Enrichment	
Unit Title: Unit 4 Aerodynamics: Paper Airplanes	**Duration:** 8 days
Target Course/Grade Level: Enrichment/ Grade 3	

Introduction/Unit Focus:

In this hands-on unit, students will become young engineers and scientists as they explore the exciting world of flight by designing and testing their own paper airplanes. Through experimentation and careful observation, students will learn about the four key forces that work together to make airplanes fly: thrust, gravity, drag, and lift.

Students will investigate how each of these forces affects the flight of a paper airplane and experiment with different designs to see how changes in shape, size, and weight influence how far and how well their airplanes fly. They will use critical thinking and problem-solving skills to test hypotheses, make improvements, and explain their results.

This independent project encourages creativity, persistence, and scientific inquiry. Students will document their design process, analyze their findings, and communicate what they have learned through presentations or reports. By the end of the unit, students will have a deeper understanding of aerodynamics and the science behind flight, as well as valuable skills in planning, experimenting, and collaborating.

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

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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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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
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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

Content Standards: New Jersey Student Learning Standards

RI.CR.3.1. Ask and answer questions and make relevant connections to demonstrate understanding of an informational text, referring explicitly to textual evidence as the basis for the answers.
RI.CI.3.2. Recount in oral and written form the key details from a multi-paragraph informational text and explain how they support the main idea.
RI.IT.3.3. Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

RL.CR.3.1. Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers.

W.WR.3.5. Generate questions about a topic and independently locate related information from at least two reference sources (print and non-print) to obtain information on that topic.

W.WP.3.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

G. Identify audience, purpose, and intended length of composition before writing.
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, find and correct errors and improve word choice.

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

3.M.
A. Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

C. Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures

1. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and

exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	
3.G A. Reason with shapes and their attributes. 1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. 2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	
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.
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 (e.g., 8.2.5.ED.2, 1.5.5.CR1a). 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.1: Identify and gather relevant data that will aid in the problem-solving process 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.3: Describe how digital tools and technology may be used to solve problems. 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global
New Jersey Student Learning Standards: Computer Science and Design Thinking	

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
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
A new tool may have favorable or unfavorable results as well as both positive and negative effects on society. Technology spurs new businesses and careers.	8.2.5.ITH.2: Evaluate how well a new tool has met its intended purpose and identify any shortcomings it might have. 8.2.5.ITH.3: Analyze the effectiveness of a new product or system and identify the positive and/or negative consequences resulting from its use. 8.2.5.ITH.4: Describe a technology/tool that has made the way people live easier or has led to a new business or career
New Jersey Student Learning Standards: Climate Change Mandate	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
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 trade- offs identified in the design process.

Knowledge and Skills

Unit Learning Targets (Objectives):
Students will be able to…

- Research and explore existing paper airplane designs to understand aerodynamic concepts.
- Apply the four key aerodynamic forces—thrust, lift, drag, and gravity—to their own aircraft designs.
- Design, build, and test paper airplanes, helicopters, and kites using aerodynamic principles.
- Record and analyze flight test data to evaluate the success of their designs.
- Write clear, step-by-step instructions explaining how to create their paper airplane.
- Develop and present a tri-fold display summarizing their design process, experiments, and conclusions.

Unit Enduring Understandings:
Students will know…

- Small changes in design can significantly affect how well a paper airplane or other flying object performs.
- The four aerodynamic forces must work together for an object to achieve and sustain flight.
- Clear communication is essential to share ideas and enable others to replicate successful designs.
- Testing, observing, and revising designs is a key part of scientific and engineering processes.

Unit Essential Questions:

- What forces make airplanes and other flying objects move through the air?
- How do thrust, lift, drag, and gravity work together to create flight?
- Why is it important to test and improve a design?
- How can we clearly explain and share the steps to build something we have designed?

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

- Part One: Introduction--Forces are involved in flying such as lift, gravity, thrust and drag as well as Bernoulli's principle.
- Part Two: Make a paper airplane--Design and use problem solving skills to get airplanes and gliders to fly further and more accurately every time

- Part Three: Make a helicopter to compare and contrast the difference in design from a paper airplane and the importance of lift
- Part Four: Learn about air pressure and static electricity with the help of balloons
- Final: Design and create a parachute and kite to learn about air resistance and the ability to keep a kite in the air

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

- Open ended writing assignments
- Computer projects
- Final projects/products
- Open ended Writing Assignments

Benchmark Assessments:

- Oral Presentations
- Rubric Based Assessments
- Computer projects (Podcasts, newsletters, etc.)

Alternative Assessments

- Portfolio Review

Performance Tasks: This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit.

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

- 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

- 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 w/ Internet connection (Science Kids website)
- Calculators
- Manipulatives
- Copies of handouts/worksheets for each student
- Teacher website
- Microsoft Office, Google Apps, StoryBoard That
- General Classroom Supply

Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL Unit 5 Overview	
Content Area: Enrichment	
Unit Title: Unit 5 Digital Storytelling Stop Motion Animation STEM	**Duration:** 8 days
Target Course/Grade Level: Enrichment/ Grade 3	

Introduction/Unit Focus:

In this creative and technology-rich unit, students will become filmmakers and storytellers as they plan, design, and produce their own stop motion animation movies. Combining their imagination with digital tools, students will learn how to bring stories to life frame by frame, practicing patience, attention to detail, and technical skills along the way.

Students will develop and organize a story with clear characters, settings, and a sequence of events. Using stop motion techniques, they will create visual scenes by capturing a series of still images and combining them into a smooth, animated movie. This process encourages careful planning, problem-solving, and collaboration.

Throughout the project, students will build skills in storytelling, visual communication, and technology use. They will explore how movement and timing affect the mood and meaning of their stories and learn to edit and refine their work to create a polished final product.

By the end of the unit, students will have produced an original stop motion film that demonstrates their creative vision and technical ability, while gaining confidence in sharing stories through modern media.

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

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

Content Standards: New Jersey Student Learning Standards

W.NW.3.3. Write narratives to develop real or imagined experiences or events with basic story elements.

A. Orient the reader by establishing a situation and introducing a narrator and/or characters; clearly organize an event sequence.
B. Use dialogue and description to develop experiences and events or show the responses of characters to situations.
C. Use transitional words and phrases to manage the sequence of events.
D. Use concrete words and phrases and sensory details to convey experiences and events.
E. Provide a conclusion or sense of closure that follows the narrated experiences or events.

W.WP.3.4. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

A. Identify audience, purpose, and intended length of composition before writing.
B. Consider writing as a process, including self-evaluation, revision and editing.
C. With adult and peer feedback, and digital or print tools such as a dictionary, thesaurus, and/or spell checker, find and correct errors and improve word choice.

W.WR.3.5. Generate questions about a topic and independently locate related information from at least two reference sources (print and non-print) to obtain information on that topic.

W.SE.3.6. Use discussion, books, or media resources to gather ideas, outline them, and prioritize the information to include while planning to write about a topic.

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

RL.MF.3.6. Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).

RI.AA.3.7. Describe the logical connection between particular sentences and paragraphs in a

text (e.g., comparison, cause/effect, first/second/third in a sequence) to support specific points the author makes in a text.	
New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills	
Core Ideas	**Performance Expectations (Identified with Standard Number and statement)**
Digital tools and media resources provide access to vast stores of information, but the information can be biased or inaccurate.	9.4.5.IML.1: Evaluate digital sources for accuracy, perspective, credibility and relevance (e.g., Social Studies Practice - Gathering and Evaluating Sources).
Accurate and comprehensive information comes in a variety of platforms and formats and is the basis for effective decision-making	9.4.5.IML.4: Determine the impact of implicit and explicit media messages on individuals, groups, and society as a whole. 9.4.5.IML.5: Distinguish how media are used by individuals, groups, and organizations for varying purposes. (e.g., 1.3A.5.R1a).
Different digital tools have different purposes	9.4.5.TL.1: Compare the common uses of at least two different digital tools and identify the advantages and disadvantages of using each
New Jersey Student Learning Standards: Computer Science and Design Thinking	
Core Ideas	**Performance Expectations (Identified with Standard Number and Statement)**
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.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.

Knowledge and Skills
Unit Learning Targets (Objectives): *Students will be able to…* • Explore and discuss important social issues relevant to their community and world. • Choose a specific social topic to focus on and teach others about through creative expression. • Design and construct puppets using a variety of materials. • Develop an original script that includes characters, setting, a clear problem, and a resolution. • Organize their script with a natural sequence of events and incorporate a narrator or characters to guide the story. • Collaborate with peers and adults to plan, revise, and improve their written work. • Perform their puppet show for a chosen audience, such as younger students, applying effective storytelling techniques. • Use digital tools to create a stop motion animation that conveys their message. • Reflect on and evaluate their performance by gathering and analyzing audience feedback.
Unit Enduring Understandings: *Students will know…* • Puppets can be made from many different materials and brought to life through performance. • A well-crafted script includes essential story elements: characters, setting, conflict, and resolution. • Successful puppet shows require coordination of scripts, performers, puppets, and a stage. • Audience reactions provide valuable insights into the effectiveness of a performance. • Creative projects like puppet shows and animations are powerful ways to communicate ideas about social issues.
Unit Essential Questions: • How can puppets be designed and used to tell a story? • What are some social issues or challenges people face today? • What are the important parts of writing a script? • How do you prepare and present a puppet or animated show to an audience?

- How can we tell if a performance connects with and impacts the audience?

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

Step One: Intro Video
Brainpop Technology/Digital Animation

Step Two: How Digital Animation is Created - Share videos explaining
Lego Stop Motion
Post It Stop Motion
How to Make Stop Motion

Use Google Slides to demonstrate movement

Step Three: Create a Storyboard

Step Four: Decide on options when creating the stop motion
paper drawings
play doh
stikbots
action figures
WWE action figures
dinosaur figures
Barbie (type) dolls

Step Five: Create a Stopmotion Animation using iPads.

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

- Open ended writing assignments
- Computer projects
- Final projects/products
- Open ended Writing Assignments

Benchmark Assessments:

- Oral Presentations
- Rubric Based Assessments
- Computer projects (Podcasts, newsletters, etc.)

Alternative Assessments

- Portfolio Review

Performance Tasks: This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit.

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

- ➢ 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

- 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