

Ocean Academy Charter School  
Curriculum Guide  
Grade 1 - Enrichment



<b>Original Adoption:</b>	August, 2025
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<b>OCEAN ACADEMY CHARTER SCHOOL Enrichment Curriculum</b>	
<b>Content Area:</b> Cross Curricular	
<b>Course Title:</b> Explorations (Enrichment)	
<b>Grade Level:</b> 1	
<b>Unit Title</b>	<b>Pacing Guide in Days</b>
STEM Explorations -Animals In the Safari	12 days (48 minutes per day; one day per week)
STEM Explorations -Save the Bees	12 days (48 minutes per day; one day per week)
STEM Explorations -Weather	12 days (48 minutes per day; one day per week)

<b>OCEAN ACADEMY CHARTER SCHOOL Unit 1 Overview</b>	
<b>Content Area:</b> Enrichment	
<b>Unit Title:</b> Unit 1 STEM Explorations Animals in the Safari	12 days (48 minutes per day; one day per week)
<b>Target Course/Grade Level:</b> Explorations (Enrichment)/ Grade 1	
<b>Introduction/Unit Focus:</b>	
<p>In this dynamic unit, first grade learners will dive into an exciting, inquiry-based exploration of the animal kingdom. With a focus on developing critical thinking, research, and communication skills, students will select an animal of personal interest and investigate its characteristics, behaviors, and environment. This project allows students to follow their</p>	

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curiosity while engaging in meaningful learning across science, mathematics, reading, and writing.

Students will apply scientific thinking to ask thoughtful questions and conduct research about their chosen animal. They will explore essential questions such as where the animal lives and how it is adapted to that environment, what it eats and how it finds or catches its food, how it moves, and what special features help it survive. Using age-appropriate research tools, such as books, videos, and guided internet sources students will record observations and gather facts, laying the foundation for future scientific investigation and reasoning.

Mathematical thinking will be naturally embedded as students compare animal sizes, measure lengths or weights, and analyze patterns in animal features such as stripes, spots, or body parts. They might also create graphs or charts to organize and compare data, strengthening their understanding of numbers, measurement, and data interpretation in a real-world context.

Reading nonfiction texts will support students in developing comprehension skills, including identifying main ideas, key details, and using text features like headings and diagrams. In writing, students will organize and express their findings in their own words, creating an informative report or booklet about their animal. They will practice using descriptive language, sequencing information logically, and combining words and illustrations to convey meaning clearly and creatively.

This unit is designed to challenge and engage high-ability learners by encouraging independent research and self-directed learning, higher-order thinking through analysis, comparison, and classification, and creative expression through writing, drawing, and oral presentations. Interdisciplinary connections will deepen their understanding across subject areas.

By the end of the unit, students will have developed a deeper understanding of animal diversity and ecosystems, honed their research and communication skills, and fostered a sense of wonder about the natural world. They will proudly share their knowledge through presentations or displays, celebrating their growth as scientists, mathematicians, writers, and thinkers.

**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.

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,

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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**

RL.CR.1.1. Ask and answer questions about key details in a literary text (e.g., who, what, where, when, why, how).

RI.CI.1.2 Determine the main topic and retell a series of key details in informational texts (e.g., who, what, where, when, why, how).

RI.AA.1.7 Identify the reasons an author gives to support points in a text and explain how that information is applied, with prompting as needed.

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

W.IW.1.2. With prompts and support, write informative/explanatory texts to examine a topic and convey ideas and information.

- A. Introduce a topic.
- B. Develop the topic with facts or other information and examples related to the topic.
- C. Provide a conclusion.

W.WR.1.5. With prompting and support, generate questions through shared research about a topic and determine possible sources to obtain information on that topic.

SL.PE.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

- A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
- B. Build on others’ talk in conversations by responding to the comments of others through multiple exchanges.
- C. Ask questions to clear up any confusion about the topics and texts under discussion.

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

**Core Ideas**

**Performance Expectations (Identified with Standard Number and statement)**

Brainstorming can create new, innovative ideas

9.4.2.CI.1:  
Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).  
9.4.2.CI.2:  
Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).

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Digital tools can be used to display data in various ways	9.4.2.IML.2: Represent data in a visual format to tell a story about the data
Collaboration can simplify the work an individual has to do and sometimes produce a better product.	9.4.2.TL.7: Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).
<b>New Jersey Student Learning Standards: <a href="#">Computer Science and Design Thinking</a></b>	
<b>Core Ideas</b>	<b>Performance Expectations (Identified with Standard Number and Statement)</b>
Technology has changed the way people live and work.  Various tools can improve daily tasks and quality of life	8.2.2.ITH.3: Identify how technology impacts or improves life.  8.2.2.ITH.4: Identify how various tools reduce work and improve daily tasks.  8.2.2.ITH.5: Design a solution to a problem affecting the community in a collaborative team and explain the intended impact of the solution.
<b>New Jersey Student Learning Standards: <a href="#">Climate Change Mandate</a></b>	
<b>Core Ideas</b>	<b>Performance Expectations (Identified with Standard Number and Statement)</b>
Digital tools and media resources provide access to vast stores of information that can be searched.	9.4.2.IML.1: Identify a simple search term to find information in a search engine or digital resource.
Young people can have a positive impact on the natural world in the fight against climate change.	9.4.2.DC.7: Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).

<b>Knowledge and Skills</b>
<p><b>Unit Learning Targets (Objectives):</b> <i>Students will be able to...</i></p> <ul style="list-style-type: none"> <li>● Use the <i>Amazing Animals of the World</i> series and other nonfiction sources to research and gather information about a safari animal.</li> <li>● Investigate and explain key aspects of their animal, including its habitat, diet, body structure, and role in the ecosystem.</li> <li>● Analyze how nonfiction text features (headings, diagrams, captions, etc.) help readers better understand informational texts.</li> </ul>

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- Use Close Reading strategies to identify and record important facts about safari animals.
- Choose and create a final project—such as a pop-up book, illustrated poster, or digital slideshow—to share their knowledge in a creative and organized way.

**Unit Enduring Understandings:**

*Students will know...*

- How to create graphs and charts to organize information
- Animal body parts and structures have specific functions that help them survive and thrive.
- How to sequence information logically
- Every living thing depends on its habitat to meet its basic needs.
- Animals use their senses and unique adaptations to live successfully in their environment.

**Unit Essential Questions:**

- How do animals change or adapt to survive in different environments?
- How do an animal's body parts help it survive and do what it needs to do?
- Why do animals need to live in specific habitats?

**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

Students will be instructed they will become an expert on an animal of their choice as they partake in a virtual safari.

Compare and contrast an African Safari and a Zoo Safari

Part Two & Four:

Investigation and Assignment

Students will partake in an African Animal Safari, collecting information as they hunt."

Keep an African Safari Animal Journal to collect information.

Create a passport as they travel the lands

Choose an animal to research: type of animal, its habitat, range, physical features, diet, interesting facts.

- Choice Board

- Picture Flipbook
- Persuasive writing using keywords
- A-Z Animal List
- Newspaper article

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- Choose Two: compare and contrast two animals
- 3D diagram

**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
- Foundations monitoring
- Graphic Organizers
- Hands on worksheets and assignments

**Summative Assessments**

- 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, manipulatives, and models to explain concepts.
- Pre-teach and review key vocabulary.
- Provide small-group or one-on-one support.
- Assign a peer tutor or “learning buddy.”
- Offer preferential seating.
- Reinforce vocabulary with gestures, songs, or movements.
- Allow extra time for projects and assessments.
- Accept oral or dictated answers.
- Provide large-print or digital/audio text when needed.

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- Use scribes or augmentative communication devices.
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**Students with 504 Plans**

- Follow the 504 plan.
  - Provide extra time for tasks and assessments.
  - Offer small-group or quiet settings for work.
  - Provide preferential seating.
  - Accept oral or dictated responses.
  - Allow use of adapted tools or communication devices.
- 

**Students at Risk of Failure**

- Provide visuals, word banks, and simple outlines.
  - Pre-teach key vocabulary and check for understanding often.
  - Break down assignments into smaller, manageable steps.
  - Read aloud directions and model expectations.
  - Provide tutoring, peer support, or a “buddy.”
  - Offer preferential seating.
  - Give frequent encouragement and feedback.
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**Gifted and Talented**

- Ask open-ended questions that promote curiosity and exploration.
  - Encourage higher-order thinking through “why” and “what if” prompts.
  - Provide opportunities for choice in projects, activities, or materials.
  - Use enrichment centers, creative problem-solving tasks, or inquiry stations.
  - Encourage independent exploration of topics of interest.
  - Provide extension activities connected to lessons (e.g., designing, experimenting, storytelling).
  - Allow students to present, share, or teach their discoveries to peers.
  - Use flexible grouping for enrichment projects.
  - Encourage reflection through drawings, journals, or group discussions.
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**Multilingual Learners**

- Collaborate with ESL/MLL teachers.
- Provide small-group support.
- Pre-teach vocabulary using visuals, real objects, and cognates when possible.

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- Use sentence frames or speaking prompts (e.g., “I noticed \_\_\_\_,” “I created \_\_\_\_ because...”).
  - Pair words with pictures, gestures, or movement.
  - Allow extended time and oral responses.
  - Label classroom materials and visuals to reinforce vocabulary.
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**Diversity and Inclusion**

- Highlight cultural traditions and perspectives in lessons and projects.
- Involve families in sharing cultural experiences.
- Provide alternative ways to complete assignments (artwork, oral, hands-on).
- Use visuals and simple, clear instructions.
- Assign supportive peers when appropriate.
- Collaborate with language professionals and support staff.
- Encourage families to maintain home language while building English skills.
- Establish respectful classroom routines and discussion norms.
- Use closed captioning for videos when available.
- Provide wait time before calling on students.
- Display word walls with relevant vocabulary.
- Foster a safe, nurturing environment that values all voices.

**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**

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**OCEAN ACADEMY CHARTER SCHOOL  
Unit 2 Overview**

**Content Area:** Enrichment

**Unit Title:** Unit 2 Save the Bees

**Duration:** 12 days (48 minutes per day;

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one day per week)

**Target Course/Grade Level: Explorations (Enrichment) / Grade 1**

**Introduction/Unit Focus:**

In this engaging unit, first grade learners will take a deeper look into the complex and fascinating world of honey bees. With a focus on inquiry, critical thinking, and collaboration, students will explore the structure and function of a bee colony, learning about the three main types of honey bees: queen, worker, and drone and the vital roles each plays in maintaining a healthy, successful hive.

Using a variety of resources, including nonfiction texts, educational videos, hands-on activities, and interactive discussions, students will investigate how honey bees communicate, gather food, build hives, and protect their colony. They will explore how each bee's responsibilities contribute to the overall functioning of the hive, gaining a deeper understanding of interdependence in nature.

As part of this exploration, students will be encouraged to ask questions, seek answers, and make connections to broader scientific concepts such as life cycles, animal behaviors, and ecosystems. Through creative projects, writing assignments, and science-based observations, they will analyze how bees work together and how their cooperative behaviors model the importance of teamwork in both nature and our own communities.

This unit is designed to inspire curiosity, support higher-level thinking, and integrate science, literacy, and social-emotional learning. It challenges gifted learners to think beyond basic facts, consider systems and relationships, and reflect on how even the smallest creatures play important roles in the natural world.

**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.

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RI.CR.1.1. Ask and answer questions about key details in an informational text (e.g., who, what, where, when, why, how).	
RI.CI.1.2 Determine the main topic and retell a series of key details in informational texts (e.g., who, what, where, when, why, how).	
RL.MF.1.6. With prompting and support, use illustrations and details in a story to describe its characters, setting, or events.	
RI.MF.1.6. With prompting and support, use text features (e.g., diagrams, tables, animations) to describe key ideas.	
W.SE.1.6. With guidance and support from adults, gather and select information from multiple sources to answer a question or write about a topic.	
W.RW.1.7. Engage in discussion, drawing, and writing in brief but regular writing tasks.	
<b>New Jersey Student Learning Standards: Interdisciplinary Connections</b> <a href="https://www.nj.gov/education/cccs">https://www.nj.gov/education/cccs</a>	
1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	
1-LS-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	
<b>New Jersey Student Learning Standards: <u>Career Readiness, Life Literacies, and Key Skills</u></b>	
<b>Core Ideas</b>	<b>Performance Expectations (Identified with Standard Number and statement)</b>
Different types of jobs require different knowledge and skills	9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
Brainstorming can create new, innovative ideas	9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).  9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a)

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Digital tools and media resources provide access to vast stores of information that can be searched	9.4.2.IML.1: Identify a simple search term to find information in a search engine or digital resource.
Digital tools can be used to display data in various ways	9.4.2.IML.2: Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10)
Digital tools have a purpose.	9.4.2.TL.2: Create a document using a word processing application.  9.4.2.TL.3: Enter information into a spreadsheet and sort the information
<b>New Jersey Student Learning Standards: <a href="#">Computer Science and Design Thinking</a></b>	
<b>Core Ideas</b>	<b>Performance Expectations (Identified with Standard Number and Statement)</b>
Data can be used to make predictions about the world.	8.1.2.DA.3: Identify and describe patterns in data visualizations.  8.1.2.DA.4: Make predictions based on data using charts or graphs
Real world information can be stored and manipulated in programs as data (e.g., numbers, words, colors, images)	8.1.2.AP.2: Model the way programs store and manipulate data by using numbers or other symbols to represent information.
Engineering design is a creative process for meeting human needs or wants that can result in multiple solutions	8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
<b>New Jersey Student Learning Standards: <a href="#">Climate Change Mandate</a></b>	
<b>Core Ideas</b>	<b>Performance Expectations (Identified with Standard Number and Statement)</b>
Young people can have a positive impact on the natural world in the fight against climate change.	9.4.2.DC.7: Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).
Digital tools and media resources provide access to vast stores of information that can be searched.	9.4.2.IML.1: Identify a simple search term to find information in a search engine or digital resource.

**Knowledge and Skills**

**Unit Learning Targets (Objectives):**

*Students will be able to...*

- Identify the three main types of honey bees in a hive: queen, worker, and drone.
- Describe the unique role and responsibilities of each type of bee in the colony.
- Explain how honey bees work together to help their hive survive and thrive.
- Use nonfiction texts, videos, and observations to gather information about honey bee behavior and life cycles.
- Ask and answer questions about how bees communicate, build hives, and gather food.
- Create a project (poster, booklet, model, or digital presentation) to represent their understanding of how a bee colony functions.
- Use vocabulary related to bees (e.g., pollination, nectar, hive, colony, cooperation) accurately in speaking and writing.
- Make connections between honey bee behavior and human teamwork or community roles.

**Unit Enduring Understandings:**

*Students will know...*

- Honey bee colonies are made up of different types of bees, each with a special job.
- Bees must work together and rely on one another to keep their colony alive and healthy.
- Cooperation and teamwork are important in nature and in our own communities.
- Honey bees play an essential role in ecosystems, especially in pollination and plant growth.
- Even small creatures can have a big impact on the environment.

**Unit Essential Questions:**

- Why should bees be saved?
- What does each type of bee do to help the hive?
- How do honey bees work together as a team?
- Why are honey bees important to nature and to people?
- What can we learn from how bees live and work together?

**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:

Introductory Lesson:

SW engage in an Escape Room to help the bees find their honey.

Part Two: What's the Buzz All About?

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SW find what's threatening the bees, explore and label the parts of a bee

Part Three, Four and Five: Meet the Honeybee

- Explore real world examples of engineering in nature (Science)
- Use the internet to research information about the featured animal (Technology)
- Use reading comprehension to answer questions about the featured animal (Reading)
- Design a prototype to solve a problem or meet a challenge (Engineering and Art)
- Use measurement, operations, understanding of geometric shapes, etc. (Mathematics)

Part Five, Six and Seven: Exploration

- Bee Sightings: Finding the location of bees, types of plants in the area as well as the type of weather at the time
- Researching Bees: Description, Habitat, Diet, Life Cycle, Behavior, Workers, Drones and Queens, Pollination, Conservation and Threats

**STEM ACTIVITIES:**

- Bee Hotel
- Bee Garden
- Choice Board
  - Video Commercial
  - Picture Collage
  - Bee T-Shirt
  - Sweet Bee Recipe--Honey Oat Cereal Bars
  - No Bake Chocolate Brownies

**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**

- Portfolio review
- Teacher made assessments

**Benchmark Assessments:**

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- Oral Presentations
- Rubric assessments
- Portfolio assessments

**Alternative Assessments**

- Based on IEP or 504 as needed

**Performance Assessment**

- Teacher created tasks

**Suggested Options for Differentiation**

**Special Education**

- Follow all IEP modifications.
  - Use visuals, manipulatives, and models to explain concepts.
  - Pre-teach and review key vocabulary.
  - Provide small-group or one-on-one support.
  - Assign a peer tutor or “learning buddy.”
  - Offer preferential seating.
  - Reinforce vocabulary with gestures, songs, or movements.
  - Allow extra time for projects and assessments.
  - Accept oral or dictated answers.
  - Provide large-print or digital/audio text when needed.
  - Use scribes or augmentative communication devices.
- 

**Students with 504 Plans**

- Follow the 504 plan.
  - Provide extra time for tasks and assessments.
  - Offer small-group or quiet settings for work.
  - Provide preferential seating.
  - Accept oral or dictated responses.
  - Allow use of adapted tools or communication devices.
- 

**Students at Risk of Failure**

- Provide visuals, word banks, and simple outlines.
- Pre-teach key vocabulary and check for understanding often.
- Break down assignments into smaller, manageable steps.
- Read aloud directions and model expectations.
- Provide tutoring, peer support, or a “buddy.”
- Offer preferential seating.
- Give frequent encouragement and feedback.

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### Gifted and Talented

- Ask open-ended questions that promote curiosity and exploration.
  - Encourage higher-order thinking through “why” and “what if” prompts.
  - Provide opportunities for choice in projects, activities, or materials.
  - Use enrichment centers, creative problem-solving tasks, or inquiry stations.
  - Encourage independent exploration of topics of interest.
  - Provide extension activities connected to lessons (e.g., designing, experimenting, storytelling).
  - Allow students to present, share, or teach their discoveries to peers.
  - Use flexible grouping for enrichment projects.
  - Encourage reflection through drawings, journals, or group discussions.
- 

### Multilingual Learners

- Collaborate with ESL/MLL teachers.
  - Provide small-group support.
  - Pre-teach vocabulary using visuals, real objects, and cognates when possible.
  - Use sentence frames or speaking prompts (e.g., “I noticed \_\_\_\_,” “I created \_\_\_\_ because...”).
  - Pair words with pictures, gestures, or movement.
  - Allow extended time and oral responses.
  - Label classroom materials and visuals to reinforce vocabulary.
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### Diversity and Inclusion

- Highlight cultural traditions and perspectives in lessons and projects.
- Involve families in sharing cultural experiences.
- Provide alternative ways to complete assignments (artwork, oral, hands-on).
- Use visuals and simple, clear instructions.
- Assign supportive peers when appropriate.
- Collaborate with language professionals and support staff.
- Encourage families to maintain home language while building English skills.
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- Use closed captioning for videos when available.
- Provide wait time before calling on students.
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- Foster a safe, nurturing environment that values all voices.

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- Teacher Computer w/ Internet connection
- Calculators
- Manipulatives
- Copies of handouts/worksheets for each student
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- 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 Stem Weather

**Duration:** 12 days (48 minutes per day;  
one day per week)

**Target Course/Grade Level:** Explorations (Enrichment) Grade 1

**Introduction/Unit Focus:**

In this unit, first grade learners will explore the dynamic world of weather through inquiry-based learning and real-world observations. Students will investigate a variety of weather conditions by collecting and analyzing weather data over time. They will deepen their understanding of how weather changes daily and seasonally by observing temperature, wind, cloud types, and precipitation patterns.

Through engaging, hands-on activities such as weather station labs, charting weather data, and analyzing patterns, students will begin to recognize how weather affects the environment and people’s daily lives. They will also explore the role of meteorologists and the tools they use, such as thermometers, wind vanes, and rain gauges to study and predict weather. Students will learn how to record their own observations systematically and use that data to make simple, evidence-based predictions about future weather conditions.

This unit fosters scientific thinking, curiosity, and problem-solving. Students will be encouraged to ask thoughtful questions, connect cause and effect, and draw conclusions based on the data they collect. Through discussions, writing, and project-based tasks, they will build both scientific knowledge and communication skills while developing a greater appreciation for the natural world.

**Disciplinary Concepts for the Unit:**

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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.

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**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**

RL.CR.1.1. Ask and answer questions about key details in a literary text (e.g., who, what, where, when, why, how).

RI.CR.1.1. Ask and answer questions about key details in an informational text (e.g., who, what, where, when, why, how).

RL.CI.1.2. Determine the central message and retell a sequence of events in literary texts (e.g., who, what, where, when, why, how).

RL.CI.1.2. Determine the central message and retell a sequence of events in literary texts (e.g., who, what, where, when, why, how).

RI.CI.1.2 Determine the main topic and retell a series of key details in informational texts (e.g., who, what, where, when, why, how).

W.IW.1.2. With prompts and support, write informative/explanatory texts to examine a topic and convey ideas and information.

- A. Introduce a topic.
- B. Develop the topic with facts or other information and examples related to the topic.
- C. Provide a conclusion.

W.WR.1.5. With prompting and support, generate questions through shared research about a topic and determine possible sources to obtain information on that topic.

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W.SE.1.6. With guidance and support from adults, gather and select information from multiple sources to answer a question or write about a topic.

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

SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. C. Ask questions to clear up any confusion about the topics and texts under discussion.

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

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
Different types of jobs require different knowledge and skills	9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job
There are benefits and drawbacks to being an entrepreneur	9.1.2.CAP.3: Define entrepreneurship and social entrepreneurship
Brainstorming can create new, innovative ideas	9.4.2.CI.1: Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).  9.4.2.CI.2: Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
Individuals from different cultures may have different points of view and experiences.	9.4.2.GCA:1: Articulate the role of culture in everyday life by describing one's own culture and comparing it to the cultures of other individuals (e.g., 1.5.2.C2a, 7.1.NL.IPERS.5, 7.1.NL.IPERS.6)

**New Jersey Student Learning Standards: Computer Science and Design Thinking**

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Individuals collect, use, and display data about individuals and the world around them.	8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats.
Engineering design is a creative process for meeting human needs or wants that can result in multiple solutions	8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
Limitations (constraints) must be considered when	8.2.2.ED.4: Identify constraints and

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engineering designs.	their role in the engineering design process
<b>New Jersey Student Learning Standards: <a href="#">Climate Change Mandate</a></b>	
<b>Core Ideas</b>	<b>Performance Expectations (Identified with Standard Number and Statement)</b>
Young people can have a positive impact on the natural world in the fight against climate change.	9.4.2.DC.7: Describe actions peers can take to positively impact climate change (e.g., 6.3.2.CivicsPD.1).
Digital tools and media resources provide access to vast stores of information that can be searched.	9.4.2.IML.1: Identify a simple search term to find information in a search engine or digital resource.
Digital tools can be used to display data in various ways.	9.4.2.IML.2: Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10).

<b>Knowledge and Skills</b>
<p><b>Unit Learning Targets (Objectives):</b> <i>Students will be able to...</i></p> <ul style="list-style-type: none"> <li>● Observe and identify different weather conditions, including temperature, wind, clouds, and precipitation.</li> <li>● Record weather data over time using charts, graphs, and observation logs.</li> <li>● Recognize and describe patterns in weather over days and weeks.</li> <li>● Use tools like thermometers, wind vanes, and rain gauges to collect accurate weather data.</li> <li>● Explain how meteorologists study and predict the weather using tools and information.</li> <li>● Make simple weather predictions based on patterns and evidence from their observations.</li> <li>● Communicate their findings through writing, discussions, and visual representations.</li> <li>● Reflect on how weather affects people, animals, and the environment.</li> </ul>

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**Unit Enduring Understandings:**

*Students will know...*

- Weather can be observed, measured, and described using specific tools and vocabulary.
- Weather patterns can change daily and seasonally, and these patterns help us make predictions.
- Scientists called meteorologists use data to study and forecast the weather.
- Observing and recording weather helps us understand the world and prepare for different conditions.

**Unit Essential Questions:**

- What is weather, and how can we observe it?
- How do scientists collect and use weather data?
- What patterns can we find in the weather over time?
- How does weather affect the way people live and prepare each day?

**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: Water Cycle and its various components
- Part Two: Seasons: How the weather changes throughout each season
- Lesson 3: Bad Weather: Characteristics of three different storms and the safety precautions to take during them
- Lesson 4: Weather Tools: How they are used to measure various types of weather
- Weather: Choice Board
  - Picture Flipbook
  - Persuasive writing using keywords
  - A-Z Weather List
  - Newspaper article
  - Choose Two: compare and contrast two weather phenomenon
  - 3D diagram

**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

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- Graphic Organizers
- Peer/Self Assessments/rubrics
- Presentations
- Work samples
- Kinesthetic Assessments
- Graphic Organizers
- Hands on worksheets and assignments

**Summative Assessments**

- 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, manipulatives, and models to explain concepts.
  - Pre-teach and review key vocabulary.
  - Provide small-group or one-on-one support.
  - Assign a peer tutor or “learning buddy.”
  - Offer preferential seating.
  - Reinforce vocabulary with gestures, songs, or movements.
  - Allow extra time for projects and assessments.
  - Accept oral or dictated answers.
  - Provide large-print or digital/audio text when needed.
  - Use scribes or augmentative communication devices.
- 

**Students with 504 Plans**

- Follow the 504 plan.
  - Provide extra time for tasks and assessments.
  - Offer small-group or quiet settings for work.
  - Provide preferential seating.
  - Accept oral or dictated responses.
  - Allow use of adapted tools or communication devices.
-

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**Students at Risk of Failure**

- Provide visuals, word banks, and simple outlines.
  - Pre-teach key vocabulary and check for understanding often.
  - Break down assignments into smaller, manageable steps.
  - Read aloud directions and model expectations.
  - Provide tutoring, peer support, or a “buddy.”
  - Offer preferential seating.
  - Give frequent encouragement and feedback.
- 

**Gifted and Talented**

- Ask open-ended questions that promote curiosity and exploration.
  - Encourage higher-order thinking through “why” and “what if” prompts.
  - Provide opportunities for choice in projects, activities, or materials.
  - Use enrichment centers, creative problem-solving tasks, or inquiry stations.
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