

Grade 2

Unit 5: Environments for Living Things

New Jersey Student Learning Standards

Established 2016-2017
Revised 2018-2019
Revised 2019-2020
Revised 2020-2021
Revised 2022-2023
Revised 2023-2024
Revised 2024-2025

Marking Period	Unit Title	Recommended Instructional Days
Trimester 3	Environments for Living Things	~60 days
NJSL - Science: <i>Title</i>	NJSL - Science: <i>Performance Expectations</i>	<p>Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSL-S within Unit</p>
<p>Ecosystems: Interactions, Energy, and Dynamics</p> <p>Biological Evolution: Unity and Diversity</p> <p>Engineering Design</p>	<ul style="list-style-type: none"> ● 2-LS2-1 Plan and conduct an investigation to determine if plants need sunlight and water to grow ● 2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants ● 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats ● K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. 	
<p>FOUNDATION Disciplinary: <i>Core Idea</i></p>	<p>FOUNDATION Disciplinary: <i>Statement</i></p>	
<ul style="list-style-type: none"> ● LS2.A: Interdependent Relationships in Ecosystems ● ETS1.B: Developing Possible Solutions ● LS4.D: Biodiversity and Humans 	<ul style="list-style-type: none"> ● Plants depend on water and light to grow. ● Plants depend on animals for pollination or to move their seeds around ● Designs can be conveyed through sketches, drawings, or physical 	<p><u>Essential Question/s:</u></p> <ul style="list-style-type: none"> ● What are the similarities and differences between plant and animal life in land and water habitats? ● How do living things find what they need to grow and survive in these habitats? ● How can I describe the interrelationships between plants and animals? <p><u>Activity Description:</u></p>

	<p>models. These representations are useful in communicating ideas for a problem's solutions to other people.</p> <ul style="list-style-type: none"> There are many different kinds of living things in any area, and they exist in different places on land and in water. 	<ul style="list-style-type: none"> explore the diversity of plant and animal life in land habitats explore the diversity of plant and animal life in water habitats identify how living things find what they need to grow and survive in specific habitats describe the interrelationships between plants and animals
<p>FOUNDATION Science and Engineering Practices: <i>Core Idea</i></p>	<p>FOUNDATION Science and Engineering Practices: <i>Statement</i></p>	<p>Interdisciplinary Connections: Connections to Math:</p>
<ul style="list-style-type: none"> Developing and Using Models Planning and Carrying Out Investigations Scientific Knowledge is Based on Empirical Evidence 	<ul style="list-style-type: none"> Develop a simple model based on evidence to represent a proposed object or tool. Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question. Make observations (firsthand or from media) to collect data that can be used to make comparisons Scientists look for patterns and order when making observations about the world 	<ul style="list-style-type: none"> 2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. 2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. 2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. MP2 Reason abstractly and quantitatively. MP4 Model with mathematics.
<p>FOUNDATION Crosscutting Concepts: <i>Core Idea</i></p>	<p>FOUNDATION Crosscutting Concepts: <i>Statement</i></p>	<p>Connections to ELA:</p>
<ul style="list-style-type: none"> Cause and Effect Structure and Function Patterns 	<ul style="list-style-type: none"> Events have causes that generate observable patterns. The shape and stability of structures of natural and 	<ul style="list-style-type: none"> W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). W.2.8 Recall information from experiences or gather information from provided sources to answer a question. SL.2.5 Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of

	<p>designed objects are related to their function(s).</p> <ul style="list-style-type: none"> Patterns in the natural and human designed world can be observed 	<p>experiences when appropriate to clarify ideas, thoughts, and feelings.</p>
<p>Social and Emotional Learning: <i>Competencies</i></p>	<p>Social and Emotional Learning: <i>Sub-Competencies</i></p>	
<ul style="list-style-type: none"> Responsible Decision-Making Relationship Skills Self-Management Social Awareness Self Awareness 	<ul style="list-style-type: none"> Develop, implement, and model effective problem-solving and critical thinking skills Utilize positive communication and social skills to interact effectively with others Recognize the skills needed to establish and and achieve personal and educational goals Demonstrate an understanding of the need for mutual respect when viewpoints differ. Demonstrate an awareness of the expectations for social interactions in a variety of ways. Recognize the importance of self-confidence in handling daily tasks and challenges. 	
<p>Assessments (Formative) <i>To show evidence of meeting the standard/s, students will successfully engage within:</i></p>		<p>Assessments (Summative) <i>To show evidence of meeting the standard/s, students will successfully complete:</i></p>
<p>Formative Assessments:</p> <ul style="list-style-type: none"> Lesson Check 		<p>Benchmarks/Summative Assessments:</p> <ul style="list-style-type: none"> Unit Test Performance Based Assessment

Differentiated Student Access to Content: Teaching and Learning Resources/Materials			
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core Resources
<ul style="list-style-type: none"> • Workbook • Leveled Readers • Hands-on Activities • Interactive Worktext 	<ul style="list-style-type: none"> • Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake • Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat instructions as needed. 	<ul style="list-style-type: none"> • Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of an online bilingual dictionary, and modified assessment and/or rubric. 	<ul style="list-style-type: none"> • Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect students to related talent development opportunities.
Supplemental Resources			
<p>Technology:</p> <ul style="list-style-type: none"> • <i>City Habitats - explore a city to find out what kinds of plants and animals live in city habitats.</i> • <i>Explore Habitats - explore where plants and animals live and why they live where they do.</i> • <i>Observe an Ant Farm - carry out an investigation to observe animals (ants) in order to compare their lives within an ant farm habitat, to identify patterns in their behavior, and to identify how the habitat's shape and stability relate to its function.</i> <p>Other:</p> <ul style="list-style-type: none"> • <i>Math - Use Equal Groups; Display Data; Solve Word Problems</i> • <i>ELA - Gather Information; Participate in a Research and Writing Project; Use Visuals; Recall Information</i> 			

- **Social Studies**
 - **People in Science & Engineering:** *Fatimah Jackson, Kevin Burgio, Caroline Solomon*
 - **Careers in Science & Engineering:** *Horticulturist, Park Ranger, Marine Biologist*

**Differentiated Student Access to Content:
Recommended Strategies & Techniques**

Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core
<ul style="list-style-type: none"> ● Large group instruction ● Small group instruction ● Think Pair Share ● Cooperative group work ● Multimedia presentations ● K-W-L ● Manipulatives ● Leveled Readers 	<ul style="list-style-type: none"> ● Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake ● Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat instructions as needed. 	<ul style="list-style-type: none"> ● Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of an online bilingual dictionary, and modified assessment and/or rubric. 	<ul style="list-style-type: none"> ● Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect students to related talent development opportunities.

Disciplinary Concept: Creativity & Innovation/Critical Thinking & Problem Solving / Technology Literacy

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Core Ideas:	<ul style="list-style-type: none"> Brainstorming can create new, innovative ideas. Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem. Collaboration can simplify the work an individual has to do and sometimes produce a better product.
	Performance Expectation/s:	<ul style="list-style-type: none"> 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). 9.4.2.CT.1: Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2). 9.4.2.CT.2: Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3). 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive). 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).
	Career Readiness, Life Literacies & Key Skill Practices	
	<ul style="list-style-type: none"> Demonstrate creativity and innovation. Utilize critical thinking to make sense of problems and persevere in solving them. Use technology to enhance productivity, increase collaboration and communicate effectively. Work productively in teams while using cultural/global competence. 	

New Jersey Legislative Statutes and Administrative Code
(place an "X" before each law/statute if/when present within the curriculum map)

x	Amistad Law: <i>N.J.S.A. 18A 52:16A-88</i>		Holocaust Law: <i>N.J.S.A. 18A:35-28</i>		LGBT and Disabilities Law: <i>N.J.S.A. 18A:35-4.35</i>	x	Diversity & Inclusion: <i>N.J.S.A. 18A:35-4.36a</i>		Standards in Action: <i>Climate Change</i>
---	---	--	---	--	---	---	--	--	---