Grade 2

Unit 3: Environments for Living Things

New Jersey Student Learning Standards

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

Trimester	Unit Title	Recommended Instructional Days
2	**Environments for Living Things**	**22-26 Days**

NJSLS - Science: ***TItle***	**NJSLS - Science:** ***Performance Expectations***	**Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLS-S within Unit**
Interdependent Relationships in Ecosystems	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.	
FOUNDATION Disciplinary: ***Core Idea***	**FOUNDATION Disciplinary:** ***Statement***	
LS2.A: Interdependent Relationships in Ecosystems LS4.D: Biodiversity and Humans ETS1.B: Developing Possible Solutions	Plants depend on water and light to grow. (2-LS2-1); Plants depend on animals for pollination or to move their seeds around. (2-LS2-2) There are many different kinds of living things in any area, and they exist in different places on land and in water. (2-LS4-1) Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. *(secondary to 2-LS2-2)*	**Essential Question/s:** What do plants need? How do plants depend on animals? What plants and animals live in water habitats? What plants and animals live in land habitats? What do plants and animals need to live and grow? How can I collect and compare data? What patterns can I observe? **Activity Description:** Investigate what plants and animals need to live and grow. Develop models to show how plants depend on animals. Explore environments to identify observable patterns.
FOUNDATION Science and Engineering Practices: ***Core Idea***	**FOUNDATION Science and Engineering Practices:** ***Statement***	
Developing and using models	• Modeling in K–2 builds on prior experiences and progresses to include using and developing	

Planning and carrying out investigations	models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions. ○ Develop a simple model based on evidence to represent a proposed object or tool. (2-LS2-2) ● Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions ○ plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a questions (2-LS2-1) ○ Make observations (firsthand or from media) to collect data which can be used to make comparisons (2-LS-1) Connections to Nature of Science: ● Scientists look for patterns and order when making observations about the world (2-LS4-1)	Observe plants and animals to compare diversity of life in water and land habitats. *Suggested Activities:* <u>Unit Phenomenon</u> ● Unit Project: Explore Habitats (Biodiversity and Humans, Planning and Carrying out Investigations); ● Lesson 1: Explore What a Plant Needs (Interdependent Relationships in Ecosystems); ● Lesson 2: Engineer It- Plan and Build a Model Tool (Developing and Using Models, Developing Possible Solutions); ● Lesson 3: Make Model Habitats (Biodiversity and Humans); ● Lesson 4: Make a Habitat Exhibit; City Habitats **Collaboration opportunities in this unit: Build on Prior Knowledge (pp. 111, 112, 125, 126, 141, 157, 164, 167), Think, Pair, Share (p.119), Cultivating New Questions (pp. 121, 137, 153, 175), Whole class (pp. 136, 173), Pairs (pp. 148, 152), Jigsaw (p. 142)* **Interdisciplinary Connections: Content: NJSLS Connections to Math** MP.2: Reason abstractly and quantitatively; MP.4: Model with mathematics; 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. MP.5: Use appropriate tools strategically; 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

<table>
<tr><td>Connections to Nature of Science
● Scientific Knowledge is based on empirical evidence</td><td></td><td rowspan="6">problems using information presented in a bar graph.

Connections to Language Arts
W.2.7 Participate in shared research and writing projects
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 experiences when appropriate to clarify ideas, thoughts, and feelings.</td></tr>
<tr><td>FOUNDATION
Crosscutting Concepts:
Core Idea</td><td>FOUNDATION
Crosscutting Concepts:
Statement</td></tr>
<tr><td>● Cause and Effect
● Structure and function</td><td>● Events have causes that generate observables patterns (2-LS2-1)
● The shape and stability of structures of natural and designed objects are related to their functions (2-LS2-2)</td></tr>
<tr><td>Social and Emotional Learning:
Competencies</td><td>Social and Emotional Learning:
Sub-Competencies</td></tr>
<tr><td>● Responsible Decision-Making
● Relationship skills
● Self-management
● Social Awareness
● Self Awareness</td><td>● 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 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</td></tr>
<tr><td colspan="2">Assessments (Formative)
To show evidence of meeting the standard/s, students will successfully engage within:</td><td>Assessments (Summative)
To show evidence of meeting the standard/s, students will successfully complete:</td></tr>
</table>

Formative Assessments: ● interactive worktext (Performance Task pp 178-179) ● Apply What You Know ● Lesson Check ● Self Check	**Benchmarks:** ● Performance- Based Assessment (pp 178, 179) ● End of Module Test/End of the Year Test ● District Assessments ● Alternative- Performance Assessment ● Unit Project ● You Solve It (Digital Only) **Summative Assessments:** ● Lesson Quiz ● Interactive Worktext (Unit 3 Review pp 180-182) ● Self-Check ● Unit Test

Differentiated Student Access to Content:
Teaching and Learning *Resources/Materials*

Core Resources	**Alternate Core Resources** ***IEP/504/At-Risk/ESL***	**ELL Core Resources**	**Gifted & Talented Core Resources**
● Workbook ● Leveled Readers ● Hands-on Activities ● Interactive Worktext	● 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,	● 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.	● 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.

	provide individual instruction as needed, modify assessments and/or rubrics, repeat instructions as needed.		

Supplemental Resources

Technology:

- HMH Co. Interactive Site
- You Solve It Simulations

Other:

- **Career Education:** Horticulturist
- **Spot Light on Scientist:** George Washington Carver, Marie Clark Taylor, Edmond Albius

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

Core Resources	Alternate Core Resources *IEP/504/At-Risk/ESL*	ELL Core Resources	Gifted & Talented Core
• Large group instruction • Small group instruction • Think Pair Share • Cooperative group work • Multimedia presentations • K-W-L • Manipulatives • Leveled Readers	• 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	• 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.	• 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.

	styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat instructions as needed.		

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	**Disciplinary Concept: Career Awareness & Planning, Creativity & Innovation, Critical Thinking & Problem Solving, Technology Literacy**	
	Core Ideas:	• Different types of jobs require different knowledge and skills. • 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:	• 9.1.2.CAP.1: Make a list of different types of jobs and describe the skills associated with each job • 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
	● 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: *N.J.S.A. 18A 52:16A-88*		Holocaust Law: *N.J.S.A. 18A:35-28*		LGBT and Disabilities Law: *N.J.S.A. 18A:35-4.35*	x	Diversity & Inclusion: *N.J.S.A. 18A:35-4.36a*	x	Standards in Action: *Climate Change*