



**Grade 2 Science**  
**Unit 3 Life Science**  
**Topic 6 Habitats – 28 days**

**Unit Overview** - Students will explore life cycles of plants and animals. Students will learn about other needs of plants, review parts of plants and learn how the parts help plants get things they need to live and grow. Students will learn about the needs of animals and how plants provide some of these needs. Additionally, students will learn how animals help plants reproduce. Students will then recognize that living organisms are found everywhere on Earth. Students will identify different land and water habitats and explain how the habitats provide needs for the living things and how the living things are adapted to obtain what they need from the habitat.

**Topic Essential Question:** How do habitats support living things?

**Lessons**

- Topic Launch/Quest Kickoff
- Lesson 1 Identify Habitats
- Lesson 2 Living Things in Land Habitats
- Lesson 3 Living Things in Water Habitats
- Topic Close –Assessment, Quest Findings

**NYSSLS Performance Expectations (PE)**

**2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.** [Clarification Statement: Emphasis is on the diversity of living things in each of a variety of different habitats.] [Assessment Boundary: Assessment does not include specific animal and plant names in specific 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.**

**Higher Order Thinking (HOTS)**

Higher Order Thinking Skills (HOTS) will be identified within each topic plan. Grade 2 HOTS include:

- sequencing
- identifying patterns
- researching
- logic
- inferencing
- academic vocabulary
- categorizing
- cause and effect
- brainstorming
- reasoning
- scientific method

**Topic Opener**

PE: 2-LS4-1

SEP: Planning and Carrying Out Investigations\*  
 Analyzing and Interpreting Data\*

DCI:

**LS4.D: Biodiversity and Humans**

- There are many different kinds of living things in any area, and they exist in different places on land and in water.

CCC: Patterns\*

\*Denotes Higher Order Thinking Skill

**Savvas**

**Highlighted labs are important to the understanding of the instructional concepts in this lesson and must be completed during Science instructional time.**

- *u*Connect Lab – What is out there?\*
- Quest Kickoff – Protect a Habitat\*
- Leveled Readers
- STEM Engineering Reader
- Science Song – Living Everywhere

<p><b><u>Lesson 1- Identify Habitats</u></b>  <b>PE:</b> 2-LS4-1, K-2-ETS1-2  <b>SEP:</b> Analyzing and Interpreting Data*          Asking Questions and Defining Problems*          Planning and Carrying Out Investigations*  <b>DCI:</b>  <b>LS4.D: Biodiversity and Humans</b></p> <ul style="list-style-type: none"> <li>There are many different kinds of living things in any area, and they exist in different places on land and in water.</li> </ul> <p><b>CCC:</b> Systems and System Models*  <b>*Denotes Higher Order Thinking Skill</b></p>	<p><b>Savvas</b>  <b>Guiding Objective</b></p> <ul style="list-style-type: none"> <li>Students will explain that plants and animals get what they need from their habitats. Students will identify different habitats.</li> </ul> <p><b>Vocabulary</b></p> <ul style="list-style-type: none"> <li>habitat</li> <li>diversity</li> <li>adaptation</li> </ul> <p><b>Connect</b></p> <ul style="list-style-type: none"> <li>TE/SB p. 196</li> <li>Jumpstart Discovery</li> </ul> <p><b>Investigate</b></p> <ul style="list-style-type: none"> <li>TE/SB pp. 197-198</li> <li><b>uInvestigate Lab – Who lives in a grassland?*</b></li> <li>Video – Identify Habitats</li> <li>Reading Check – Compare and Contrast*</li> </ul> <p><b>Synthesize</b></p> <ul style="list-style-type: none"> <li>TE/SB pp. 198 -199</li> <li>Interactivity – Your Home is Your Habitat</li> <li>Quest Connection*</li> <li>Literacy Toolbox – Main Idea and Detail*</li> </ul> <p><b>Demonstrate</b></p> <ul style="list-style-type: none"> <li>TE/SB p.199-200</li> <li>Lesson 1 Quiz</li> <li><b>Quest Check-In Lab – Which habitat is the best?*</b></li> </ul>
<p><b><u>Lesson 2 Living Things in Land Habitats</u></b>  <b>PE:</b> 2-LS4-1  <b>SEP:</b> Obtaining, Evaluating, and Communicating Information*  <b>DCI:</b>  <b>LS4.D: Biodiversity and Humans</b></p> <ul style="list-style-type: none"> <li>There are many different kinds of living things in any area, and they exist in different places on land and in water.</li> </ul> <p><b>CCC – Systems and System Models*          *Denotes Higher Order Thinking Skill</b></p> <p><b><u>CLRI Literacy Connections:</u></b>  <b>Embed:</b>          “The Tree Lady” by H. Joseph Hopkins  <b>Synopsis:</b>          The true story of Katherine Olivia Sessions. Sessions was a tree-loving woman and, against the conventions of the 1880’s, she studied science and graduated college. Eventually she was instrumental in populating the desert-like area of San Diego, California with millions of trees.  <b>Questions:</b></p> <ol style="list-style-type: none"> <li>Even though in the 1800’s girls were not encouraged to study science, what did Kate do in school?</li> <li>How did Kate feel when in the woods?</li> <li>Name 3 things Kate did when she was in college.</li> <li>What characteristics were necessary for plants to survive in San Diego?</li> <li>What impact did Kate’s love for trees and plants have on the city of San Diego?</li> </ol>	<p><b>Savvas</b>  <b>Guiding Objective</b></p> <ul style="list-style-type: none"> <li>Students will identify where plants and animals live on land.</li> </ul> <p><b>Vocabulary</b></p> <ul style="list-style-type: none"> <li>tundra</li> </ul> <p><b>Connect</b></p> <ul style="list-style-type: none"> <li>TE/SB p. 204</li> <li>Jumpstart Discovery*</li> </ul> <p><b>Investigate</b></p> <ul style="list-style-type: none"> <li>TE/SB pp.205-208</li> <li>Video – Living Things in Land Habitats</li> <li><b>uInvestigate Lab – What do land plants need?*</b></li> <li>Science Practice Toolbox – Plan an Investigation*</li> <li>Quest Connection</li> </ul> <p><b>Synthesize</b></p> <ul style="list-style-type: none"> <li>TE/SB pp. 207, 209</li> <li>Interactivity – Compare Land Habitats*</li> <li>Quest Check-In – Habitat Diversity*</li> </ul> <p><b>Demonstrate</b></p> <ul style="list-style-type: none"> <li>TE/SB p.208</li> <li>Lesson 2 Quiz</li> </ul>

<p><b>Lesson 3 Living Things in Water Habitats</b>  <b>PE:</b> 2-LS4-1  <b>SEP:</b> Developing and Using Models*          Planning and Carrying Out Investigations*  <b>DCI:</b>  <b>LS4.D: Biodiversity and Humans</b></p> <ul style="list-style-type: none"> <li>There are many different kinds of living things in any area, and they exist in different places on land and in water</li> </ul> <p><b>CCC – Systems and System Models*</b>          Structure and Function*</p> <p><b>*Denotes Higher Order Thinking Skill</b></p> <p><b><u>CLRI Literacy Connections:</u></b>  <b>Embed:</b>          “Beach Tail” by Karen Lynn Williams  <b>Synopsis:</b>          Read the story of a young boy and father enjoying a day of adventure at the beach and observing the creatures, sand, and movement of the water.  <b>Questions:</b></p> <ol style="list-style-type: none"> <li>What did the boy and father do first when they got to the beach?</li> <li>What types of creatures did the boy find on the beach?</li> <li>How did the water change the trail that the boy made in the sand?</li> <li>What clues did the boy have that helped him find his father</li> </ol>	<p><b>Savvas</b>  <b>Guiding Objective</b></p> <ul style="list-style-type: none"> <li>Students will identify where plants and animals live in water.</li> </ul> <p><b>Vocabulary</b></p> <ul style="list-style-type: none"> <li>wetland</li> <li>marsh</li> <li>swamp</li> </ul> <p><b>Connect</b></p> <ul style="list-style-type: none"> <li>TE/SB p. 210</li> <li>Jumpstart Discovery*</li> </ul> <p><b>Investigate</b></p> <ul style="list-style-type: none"> <li>TE/SB pp. 211-214</li> <li>Video – Living Things in Water Habitats</li> <li><b>uInvestigate Lab – How do plants survive in water?*</b></li> <li>Connecting Concepts Toolbox – Structure and Function*</li> <li>Reading Check – Main Idea and Detail*</li> <li>Quest Connection*</li> </ul> <p><b>Synthesize</b></p> <ul style="list-style-type: none"> <li>TE/SB pp. 215-216</li> <li>Interactivity – Explore Water Habitats</li> <li>Quest Check-In – Why Some Animals Live in Water*</li> </ul> <p><b>Demonstrate</b></p> <ul style="list-style-type: none"> <li>TE/SB p.215</li> <li>Lesson 3 Quiz</li> </ul>
<p><b><u>Topic Close</u></b></p> <ul style="list-style-type: none"> <li>Assessment and Remediation TE/SE pp. 220-225</li> <li>Quest Finding 218</li> </ul> <p><b><u>CLRI Literacy Connections:</u></b>  <b>Enrichment: Independent Reading</b>          “Shark Lady – The story of How Eugenie Clark Became the Ocean’s Most Fearless Scientist” by Jess Keating  <b>Synopsis:</b>          “Eugenie wished everyone could see sharks through her eyes. To others, sharks were ugly and scary. But Eugenie knew they were beautiful.” She decided to learn more about them, explore and try to protect them.</p>	<p><b><u>Topic 6 Enrichment</u></b>  <b>Topic 6- Lesson 1 Enrichment</b> - TE p.199 - This activity extends student understanding of the lesson by having students observe and make comparisons of small and large habitats.  <b>Enrichment Skill- Reasoning</b></p> <p><b>Topic 6- Lesson 2 Enrichment</b> - TE p. 207 - This activity extends student understanding of the lesson by encouraging students to research types of forests near their homes.  <b>Enrichment Skill- Research</b></p> <p><b>Topic 6- Lesson 3 Enrichment</b> - TE p. 215 - This activity extends student understanding of the lesson by having students read text and answer questions about mangrove habitats.  <b>Enrichment Skill- Inference</b></p>
<p><b><u>Cumulative Enrichment Project- Grade 2 - (Categorizing, Sequencing, Inferring, Academic Vocabulary, Reasoning)</u></b>          Page 1: Students will identify and count the number of living and non-living objects in a picture.          Page 2: Students will determine the habitat with the greatest diversity and lowest biodiversity. They will also use evidence collected on page 1 to make an inference as to why that habitat had greater/lower diversity.          Page 3: Students will categorize events as “quick” or “slow” changes on Earth.          Page 4: Students will place the events in order from slowest to quickest, state the evidence used to determine this order, and write down their reasoning (Claim-Evidence-Reasoning graphic organizer)</p>	

<p><b>English Language Learners (ELL) Enhancements</b></p> <p>To access <a href="#">hyperlinked</a> material, you must be logged into your BPS Google Drive</p>	<p><b><u>Listening</u></b></p> <ul style="list-style-type: none"> <li>● <b><u>Cross- Linguistic Practices</u></b>: Gives students opportunities to make connections between what they hear and their home language (For example, allow students to listen to a passage and identify cognates).</li> <li>● <b><u>Activating Prior Knowledge</u></b> Activating prior knowledge means both eliciting from students what they already know and building initial knowledge that they need in order to access upcoming content.</li> <li>● <b><u>Activating Prior Knowledge</u></b></li> <li>● <b><u>Visuals</u></b> - GIFs, pictures- will assist students in understanding what they are listening to. Use <b><u>visual thinking strategies</u></b> to set the lens for learning.</li> <li>● Video to review or introduce a topic – use <b><u>closed captioning</u></b> to help students see the words and pronunciations while they listen to the content.</li> <li>● <b><u>Word stretching / Vowel stretching</u></b> when instructing allows student to listen closely to the pronunciation of the word.</li> <li>● <b><u>Performance Level Descriptors</u></b> this document provides teachers with a description of what output they can expect from students based on earned NYSESLAT levels in the modality of listening. Scroll for grade 2.</li> </ul>
	<p><b><u>Speaking</u></b></p> <ul style="list-style-type: none"> <li>● <b><u>Sentence Stems/Frames</u></b> - to begin a sentence - such as <i>Evolution is...</i> or <i>I think that evolution is...</i></li> <li>● <b><u>Academic Conversation Starters</u></b>: Have a visual of a list of academic sentence starters that students can refer to in a discussion.</li> <li>● <b><u>Choral Reading</u></b> - To build fluency, self-confidence and motivation with <b><u>reading/speaking</u></b></li> <li>● Create <b><u>movement</u></b> to go with the word. Movement can be a motivating factor, as well as a kinesthetic tool for conceptualizing the rhythm and flow of fluent reading while triggering brain function for optimal learning</li> <li>● <b><u>Performance Level Descriptors</u></b> This document provides teachers with a description of what output they can expect from students based on earned NYSESLAT levels in the modality of speaking. Scroll for grade 2.</li> </ul>
	<p><b><u>Reading</u></b></p> <ul style="list-style-type: none"> <li>● Supplementary Text to help reinforce concepts.</li> <li>● <b><u>Visual Aids</u></b> - Pictures or models to support vocabulary words and concepts</li> <li>● Video to review or introduce a topic - use <b><u>closed captioning</u></b> to help students read along while they listen to the content.</li> <li>● <b><u>4 Square / Frayer models</u></b> to help students gain a deeper understanding of vocabulary.</li> <li>● <b><u>Highlighting</u></b> important text to assist students in answering questions after the reading.</li> <li>● <b><u>Chunking</u></b>-Break reading of text into chunks or paragraphs</li> <li>● <b><u>Performance Level Descriptors</u></b> this document provides teachers with a description of what output they can expect from students based on earned NYSESLAT levels in the modality of reading. Scroll for grade 2.</li> <li>● <b><u>Vocabulary Morphology</u></b>- Morphology relates to the segmenting of words into affixes (prefixes and suffixes) and roots or base words, and the origins of words. Understanding that words connected by meaning can be connected by spelling can be critical to expanding a student’s vocabulary.</li> </ul>
	<p><b><u>Instructional Accommodations (depending on the student’s needs)</u></b></p> <ul style="list-style-type: none"> <li>● <b>Extended time</b> for tests in class, projects and assignments</li> <li>● <b>Directions read.</b> Broken down as necessary</li> <li>● <b>Model</b> how to complete the activity in the lesson</li> <li>● <b>Oral simplification</b> of directions or questions</li> <li>● <b>Translated version</b> of test when available. Student may have both version English and native language version</li> <li>● Use of <b><u>approved bilingual glossaries</u></b> from NYS in each subject</li> </ul>

<p><b>Special Education Modifications</b> Special Education students must have accommodations as per Individual Educational Plan (IEP)</p>	<p><b><u>Instructional</u></b></p> <ul style="list-style-type: none"> <li>● <b>Pre-teach</b> vocabulary</li> <li>● Use <b>picture vocabulary</b></li> <li>● Scaffold <b>Depth of Knowledge</b> questions</li> <li>● Provide copy of notes/<b>notes in “cloze”</b> form</li> <li>● Use of <b>Think, Pair, and Share</b> strategy to help process information</li> <li>● <b>Scaffold</b> written assignments with the use of <b>graphic organizers</b></li> <li>● Allow for <b>multiple ways to respond</b> (verbal, written, response board)</li> <li>● Provide <b>model of performance task</b></li> <li>● <b>Modify informational text</b> to fit the needs of the students</li> <li>● Provide a digital or paper <b>interactive notebook</b></li> <li>● Present complex <b>tasks in multiple ways</b></li> <li>● Provide <b>mnemonic strategies</b> for scientific concepts</li> </ul> <p><b><u>Technology:</u></b></p> <ul style="list-style-type: none"> <li>● <b>Audio</b> reading of text</li> <li>● <b>Text to type</b> functions</li> <li>● <b>Videos</b> to clarify/visualize science concepts</li> <li>● <b>Record class lecture/discussions</b> and make accessible to student</li> <li>● <b>Nearpod-</b> interactive presentations of notes</li> </ul> <p><b><u>In Class Assessments</u></b></p> <ul style="list-style-type: none"> <li>● Provide <b>multiple options</b> for projects</li> <li>● <b>Use of timer</b> in class</li> <li>● Break all complex tasks into chunks</li> </ul>
<p><b>Step Up to Writing</b> Step Up to Writing materials can be found in BPS Science K-12 Schoology Folder Grade 2 Resources Grade 2 Curriculum Materials SUTW materials</p>	<ul style="list-style-type: none"> <li>● Easy Two-Column Notes</li> <li>● Breaking Down Definitions</li> <li>● Paragraph Frame- What I Learned</li> <li>● <b><u>Performance Level Descriptors</u></b> this document provides teachers with a description of what output they can expect from students based on earned NYSESLAT levels in the modality of writing. Scroll for grade 2.</li> </ul>
<p><b>Culturally and Linguistically Responsive Teaching (CLRT) in the Science Classroom</b></p>	<ul style="list-style-type: none"> <li>● Materials, resources, and/or discussions address diverse cultural backgrounds and real-world applications</li> <li>● Artifacts (posters, charts, etc.) in the science classroom are representative of the cultures of the student population</li> <li>● All students are given an opportunity to engage in science discourse</li> <li>● Teacher demonstrates high expectations for all students</li> </ul>