Unit Title: Life Science
Grade Level: *5th Grade*
Subject Area: *Reading, Science*
Duration/Length/Number of class periods: 10 Days
Description:

Established Goals (National, State, Local):

5.4.1.1.1 Describe how plant and animal structures and their functions provide an advantage for survival in a given natural system. For example: Compare the physical characteristics of plants or animals from widely different environments, such as desert vs. tropical, and explore how each has adapted to its environment.
5.4.2.1.1 Describe a natural system in Minnesota, such as a wetland, prairie, or garden, in terms of the relationships among its living and nonliving parts, as well as inputs and outputs. For example: Design and construct a habitat for a living organism that meets its need for food, air and water.
5.4.2.1.2 Explain what would happen to a system such as a wetland, prairie or garden if one of its parts were changed. For example: Investigate how road salt runoff affects plants, insects and other parts of an ecosystem. Another example: Investigate how an invasive species changes an ecosystem.
5.4.4.1.1 Give examples of beneficial and harmful human interaction with natural systems. For example: Recreation, pollution, wildlife management.

What Enduring Understandings are desired? 　1. Living things are diverse with many different characteristics that enable them to grow, reproduce and survive. (5.4.1.1.1) 　2. Natural systems have many parts that interact to maintain the living system. (5.4.2.1.1 & 5.4.2.1.2) 　3. Humans change environments in ways that can be either beneficial or harmful to themselves and other organisms. (5.4.4.1.1)
What Essential Questions will be considered? What makes an organism able to survive in an environment? How are ecosystems affected when one piece is removed or changed? How do human interactions affect environments?
Students will know / be able to: Students will be able to describe how organisms survive in a specific environment based on their physical characteristics. Students will be able to describe a natural system in Minnesota by the relationships of the living and non-living parts. Students will be able to explain what happens to a system when one of its parts is changed. Students will be able to give examples of beneficial and harmful human interactions with natural systems.

Description — *Units must include at least one of each formative, summative, introductory activity and learning activity. Check the appropriate box; one per row.*	Formative	Summative	Introductory Activity	Learning Activity	Student Technology Used	Teacher Technology Used	ISTE Standards
5.4.1.1.1 -Adaptations game			x		**Google Sheets**		
5.4.1.1.1 -Read 129-132 in interactive Science textbook -Read 135-139				x			
5.4.1.1.1 -Create Google Form for Questions on page 133 and 139 -Describe three adaptations that might help a plant survive in a very windy environment. -Describe how adaptations can help plants survive. -A hedgehog is a small mammal that is covered with sharp spines for protection. How do the offspring of a hedgehog benefit from this adaptation?	x				**Google Form**		
5.4.2.1.1 -(Homework) Sketch a describe a local ecosystem. Discuss environmental factors in students drawings.			x		**Google Drawings**		
5.4.2.1.1 -Noticing on ecosystem posters gallery walk (post different ecosystems around the room) -Read pages 209-215				x	http://www.sheppardsoftware.com/		
5.4.2.1.1 -How are food chains and food webs alike and different? -Read a graph (activity on pg 222)	x				**Pear Deck**		

-What are the roles of producers, consumers, and decomposers in a food chain?							
5.4.2.1.2 -Brainstorm something that could change the environment at the location given to you.			x		**Word Cloud**		
5.4.2.1.2 -Read pages 224-230				x	**Google Expedition**		
5.4.2.1.2 -Give an example of how a change in the environment can affect the way living things interact.	x				**Flip grid**		**2b**
5.4.4.1.1 --Invasive species game			x				**3d**
5.4.4.1.1 -Read pages 233-235				x			**3d**
5.4.4.1.1 -What are the ways that people can protect the environment? -What is the consequence of bringing a non-native species into an ecosystem?	x				**Padlet**		**3d**
Students will be assigned a Minnesota environment/ habitat. They create a presentation (Slides/Movie/Digital Storytelling, Research Paper) - Describe the characteristics of the environment (biotic and abiotic elements) - Describe at least one animal and one plant in the environment and what makes them successful in their setting. - Describe the problems that arise in this environment due to human interaction and explain what would happen to that environment if one of its parts were changed.		x			**WeVideo/ Slides/ Docs** Post to student website		**1a, 1c, 2c, 6a**

Materials, tools and resources: Text book for readings, chromebooks.
Unit Plan Author: Erin Franson and Angela Harvala
Additional credit given to: Reading passages come from the curriculum our school uses Pearson Interactive Science