

Wright City Science Curriculum
(4th Grade)

Grade	4th Grade
Unit of Study	Plant and Animal Structures
Length of Unit	30 mins per day
Sample Essential Questions	Sample Corresponding Big Ideas
- How do internal and external structures help plants and animals survive, grow, and reproduce? - Why do different organisms have such different body parts for survival?	LS1.A: Structure and Function Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (A.1)
- How do animals use their senses to gather information and their brains to decide how to react? - What is the process for an animal to receive a signal and respond to it?	LS1.D: Information Processing Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions. (D.1)

Missouri Learning Standards	
Priority Standards	Supporting Standards
4.LS1.A.1 -Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and plant reproduction.	4.W.2.A.e Write opinion texts that reference the name of the author(s) or name of the source used for details or facts included in the text. (C.1)
4.L.S1.D.1 -Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.	4.W.3.A.b-f Apply research process to: b) create a research question to address relevant to a chosen topic; c) identify a variety of relevant sources, literary and informational; d) use organizational features of print and digital sources efficiently to locate information; e) convert graphic/visual data into written notes and; f) determine the accuracy of the information gathered. (C.1)

Unit 1 Sequence			
MLS	Topic(s)	Learning Targets	Academic Vocabulary
LS1.A:	Plants and Animal Structures	I can construct an argument that plants and animals have internal and external structures that work together to support survival, growth, behavior, and reproduction. I can compare the internal structures (e.g., heart, lungs, vascular tissues in plants) of different organisms to explain how they carry out life functions. I can describe how specific plant structures (roots, leaves, thorns, flowers) help them absorb nutrients, defend themselves, and reproduce.	Structure Function Internal Structure External Structure Organism Survival Reproduction Vascular System Defense Mechanism
LS1.D:	Information Processing	: I can use a model to describe how animals receive information through their senses, process it in the brain, and respond with immediate actions or memories. I can trace the path of information from a sensory receptor (e.g., eye, ear, skin) to the brain and to an animal's response. I can explain how animals use past memories processed by the brain to guide future decisions and behaviors.	Sensory Receptor Stimulus Sensory Input Processing Brain Response Nerve Memory
4.ETS1.A.1, 4.ETS1.B.1, 4.ETS1.C.1	Engineering Design	I can define a design problem by identifying the criteria (what it must do) and constraints (limits like time or money). I can brainstorm multiple solutions and compare them to see which one works best. I can carry out a fair test to find "failure points" in my model. I can use data from my tests to improve my design.	design constraint failure points

MLS	Learning Activities	
LS1.A:	Plants Think and Link	Can Do ▾
LS1.D:	Various internal and External structure activities (Bite, chew, chomp/ reflex testing/ candy camouflage/ etc)	Can Do ▾

Assessments		
MLS	Description or Location	Rubric/Location
LS1.A L.S1.D	Animal Superpower project	In the slides

Additional Resources	
•	Plants think and link
•	Plants and animal structure packet is a PDF
•	Animal Superpower slides
•	Materials