



## Module 2: Structure and Function of Living Things

**Core Idea:** LS1 From Molecules to Organisms: Structure and Process

Prerequisite Learning: 3.LS1.1, 2.LS1.1, 2.LS1.3, K.LS1.1, K.LS1.3	Percent of Time: 9%		
Standard	Questions and Phenomenon Prompts	Module Vocabulary	Teacher Background/ Clarification Statement
<ul> <li>5.LS1.1 Compare and contrast animal responses that are instinctual versus those that are gathered through the senses, processed, and stored as memories to guide their actions.</li> <li>Learning Targets:         <ul> <li>Understand that some animal responses are based on instinct (a behavior that does not have to be taught) like migration or hibernation as response to temperature change, reproduction, protecting young, hunting prey, and fleeing from predators.</li> <li>Understand that some animal responses are based on memories gathered in their environment like determining when fruit is rotten because of previous experiences eating brown, smelly fruit, or losing fear of humans because of being feed.</li> <li>Identify and evaluate using evidence behaviors that are innate or instinctual and behaviors that are guided by memory.</li> </ul> </li> <li>Crosscutting Concepts:         <ul> <li>Pattern-Students use patterns as evidence in an argument or to make predictions, construct explanations, and engage in arguments.</li> </ul> </li> <li>Science and Engineering Practice:         <ul> <li>Developing and using models-Student models begin to become abstract and metaphorical, incorporating relationships between events and predictive aspects for recurring events.</li> </ul> </li> </ul>	What are some behaviorsyouknew how to do from birth and what are some you had to learn?  Investigate phenomena such as migration, hibernation, birds learningtofly.  Is there a pattern that you can recognize in some animal behaviors that are instinctive?	Instinct Innate Migration Hibernation Sensory organ Nervous system Reflex	Organisms survive by gathering and processing information about their surroundings. Animals use their sensory organs to detect information about its surroundings. For instance, eyes detect light and ears detect sound.  Information that is detected by sensory organs travels to the brain where it is processed. Information gathered may be guided by how an animal's memory interprets the information. The focus is not on how this process happens in the brain.