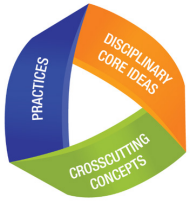


NGSS Standards & Distance Learning from the Missoula Butterfly House & Insectarium

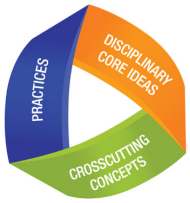
Distance learning programs from the Missoula Butterfly House & Insectarium are designed to accommodate a range of ages and grade levels. With that age range in mind we have identified the *Crosscutting Concepts*, *Science and Engineering Practices* and *Disciplinary Core Ideas* that each program supports.

Creative Creatures and Bug Biomimicry however, have grade level specific NGSS standards that they address.

Creative Creatures addresses K-LS1-1 : "Use observations to describe patterns of what plants and animals, including humans, need to survive."

Bug Biomimicry addresses 1-LS1-1: "Use materials to design a solution to a human problem by mimicking plant and animal structures and functions that help them survive, grow and meet their needs"

	Creative Creatures	Bug Biomimicry
Crosscutting Concepts		
Patterns		
Cause & Effect	x	x
Scale Proportion and Quantity		
Systems and Systems Models	x	x
Energy and Matter		
Structure and Function	x	x
Stability and Change		
Science and Engineering Practices		
Asking Questions and Defining Problems	x	x
Developing and Using Models		x
Planning and Carrying out Investigations		x
Analyzing and Interpreting Data	x	x
Using Mathematics and Computational Thinking		
Constructing Explanations and Designing Solutions	x	x
Engaging in Argument from Evidence		
Obtaining, Evaluating, and Communicating Information		
Disciplinary Core Ideas		
LS1: From Molecules to Organisms: Structures and Processes	x	x
LS2: Ecosystems: Interactions, Energy, and Dynamics	x	
LS3: Heredity: Inheritance and Variation of Traits		
LS4: Biological Evolution: Unity and Diversity		



NGSS Standards & Distance Learning from the Missoula Butterfly House & Insectarium

	Super Spiders	Millipedes vs Centipedes	Beetle-mania	Bug Wrangling	Little Things, Big Jobs
Crosscutting Concepts					
Patterns	x	x	x		x
Cause & Effect					
Scale Proportion and Quantity					
Systems and Systems Models	x	x			
Energy and Matter		x			
Structure and Function	x	x	x	x	x
Stability and Change					
Science and Engineering Practices					
Asking Questions and Defining Problems	x	x	x	x	x
Developing and Using Models	x				
Planning and Carrying out Investigations					
Analyzing and Interpreting Data					
Using Mathematics and Computational Thinking					
Constructing Explanations and Designing Solutions					
Engaging in Argument from Evidence				x	
Obtaining, Evaluating, and Communicating Information					
Disciplinary Core Ideas					
LS1: From Molecules to Organisms: Structures and Processes	x	x	x	x	x
LS2: Ecosystems: Interactions, Energy, and Dynamics	x	x	x	x	x
LS3: Heredity: Inheritance and Variation of Traits	x				
LS4: Biological Evolution: Unity and Diversity	x		x		