# THE LIFE OF A BUTTERFLY

#### **Next Generation Science Standards**

## Standard: K-LS1 From Molecules to Organisms: Structures and Processes

• K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.

#### Standard: 1-LS1 From Molecules to Organisms: Structures and Processes

• 1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

#### Standard: 1-LS3 Heredity: Inheritance and Variation of Traits

• 1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

## Standard: 2-LS2 Ecosystems: Interactions, Energy, and Dynamics

• 2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

### Standard: 3-LS1 From Molecules to Organisms: Structures and Processes

• 3-LS1-1. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

## Standard: 3-LS3 Heredity: Inheritance and Variation of Traits

• 3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.

## Standard: 3-LS4 Biological Evolution: Unity and Diversity

• 3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

### Standard: 4-LS1 From Molecules to Organisms: Structures and Processes

• 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

• 4-LS1-2. 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.

#### Standard: 5-LS2 Ecosystems: Interactions, Energy, and Dynamics

• 5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

# Standard: MS-LS1 From Molecules to Organisms: Structures and Processes

• MS-LS1-4. Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

## Standard: MS-LS2 Ecosystems: Interactions, Energy, and Dynamics

- MS-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- MS-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.