

Standards:

NGSS Alignment

Life Science Expo 2018

### Dimension 1

#### Scientific and Engineering Practices:

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking

### Dimension 2

#### Crosscutting Concepts:

- Patterns
- Cause and effect: Mechanism and explanation
- Scale, proportion, and quantity
- Systems and system models
- Energy and matter: Flows, cycles, and conservation
- Structure and function
- Stability and change

#### Disciplinary Core Ideas:

- 3-LS4-3: Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
- 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.
- 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.

- 3-LS3-1: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.
- 3-LS3-2: Use evidence to support the explanation that traits can be influenced by the environment.
- 3-LS4-2: Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.
- 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.
- 5-LS1-1: Support an argument that plants get the materials they need for growth chiefly from air and water.
- 5-LS2-1: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

\_\_ Organisms and Ecosystems Activities    \_\_ Health and Nutrition    \_\_ Adaptations and Inheritance

	3-LS1-1	3-LS1-2	3-LS2-1	3-LS2-2	3-LS2-3	3-LS3-1	3-LS3-2	3-LS3-3	4-LS1-1	4-LS1-2	5-LS1-1	5-LS1-2
Magical Microbes							x					
Gone Fishin' in Lake Tahoe							x					



Play to your Strength										x			
A Bone of your Own										x			
Don't Hold Your Breath										x			
Your Amazing Heart										x			
Germy Transfer													
Rethink your Drink													
Fruit and Veggie DNA	x												
DNA Recipes			x										
Crazy Traits			x										
Tree of Life	x												
Natural Selection in Action						x	x	x					
Brilliant Bird Beaks				x		x	x						
Blubber Glove			x	x		x	x						
Flower Engineers				x		x							
Seeds on the Move										x			

Awesome Owls

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