

# BACKYARD WILDERNESS

## North Carolina State Standards

### Kindergarten

K.L.1 Compare characteristics of animals that make them alike and different from other animals and nonliving things.

K.L.1.1 Compare different types of the same animal (i.e. different types of dogs, different types of cats, etc.) to determine individual differences within a particular type of animal.

K.L.1.2 Compare characteristics of living and nonliving things in terms of their: growth, structure, changes, movement, basic needs

### Grade 1

1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.

1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.

1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.

### Grade 2

2.L.1 Understand animal life cycles

2.L.1.1 Summarize the life cycle of animals: • Birth • Developing into an adult • Reproducing • Aging and death

2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.

2.L.2 Remember that organisms differ from or are similar to their parents based on the characteristics of the organism.

2.L.2.2 Recognize that there is variation among individuals that are related.

### Grade 4

4.L.1 Understand the effects of environmental changes, adaptations and behaviors that enable animals (including humans) to survive in changing habitats.

4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.

4.L.1.4 Explain how differences among animals of the same population sometimes give individuals an advantage in surviving and reproducing in changing habitats.

## **Grade 5**

5.L.2 Understand the interdependence of plants and animals with their ecosystem.

5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors).

5.L.2.3 Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.

## **Grade 7**

7.L.2 Understand the relationship of the mechanisms of cellular reproduction, patterns of inheritance and external factors to potential variation among offspring.

7.L.2.3 Explain the impact of the environment and lifestyle choices on biological inheritance (to include common genetic diseases) and survival.

## **Grade 8**

8.L.3 Understand how organisms interact with and respond to the biotic and abiotic components of their environment.

8.L.3.2 Summarize the relationships among producers, consumers, and decomposers including the positive and negative consequences of such interactions including: • Coexistence and cooperation • Competition (predator/prey) • Parasitism • Mutualism

8.L.3.3 Explain how the flow of energy within food webs is interconnected with the cycling of matter (including water, nitrogen, carbon dioxide and oxygen).

## **High School**

Bio 2.1 Analyze the interdependence of living organisms within their environments.

Bio 2.1.2 Analyze the survival and reproductive success of organisms in terms of behavioral, structural, and reproductive adaptations.

Bio 2.1.3 Explain various ways organisms interact with each other (including predation, competition, parasitism, mutualism) and with their environments resulting in stability within ecosystems.