



## Lesson Overview: Bioblitz Skillbuilders

Grades: 2-5

### Big Idea/Learning Goal

How can we use the skills of a naturalist to discover and understand biodiversity?

### Essential Questions

- How can we use descriptive words and information to **observe** organisms?
- How can we use field guides to **identify** birds based on physical characteristics?
- *How* diverse is biodiversity?
- How do we **differentiate** among so many organisms?
- How can we **practice** observation and classification **skills** to identify real organisms?

### Objectives

- Students will **develop observation skills** by describing, interpreting and drawing organisms.
- Students will **identify** organisms by observing field markings and using field guides.
- Students will **classify** organisms by organizing organisms according to different characteristics.
- Students will **practice field methods** including using binoculars and magnifying glasses, taking measurements, recording data, and using field guides.
- Students **explore misconceptions about biodiversity** by hypothesizing the number of animal species and comparing to scientific estimates.

### Assessments

- Questioning/discussions
- Identifying birds and using dichotomous keys
- Field/classroom notes

### Activities

1. [Meet a Creature](#)
2. [ID that Bird Using Field Guides](#)
3. [How Diverse is Biodiversity?](#)
4. [Modeling Classification](#)
5. [ID Using Dichotomous Keys](#)

## Next Generation Science Standards

### Performance Expectations

2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

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.

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

### Science and Engineering Practices

- Asking Questions and Defining Problems
- Developing and Using Models
- Analyzing and Interpreting Data
- Constructing Explanations and Designing Solutions
- Obtaining, Evaluating, and Communicating Information



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