# American Robin

Life Science | Lesson Guide

1st Grade

## Photo Description

This is an American robin, a medium-sized bird with a dark gray head and back, and a rust-colored chest and belly. The robin is standing on a rock in its natural habitat with soil, small plants, and vegetation visible around it. You can see the robin's thin legs, pointed yellow beak, and small dark eye clearly in the photo.

## Scientific Phenomena

Anchoring Phenomenon: Why do birds stand on rocks and the ground?

Birds like this robin perch on elevated surfaces such as rocks to get a better view of their surroundings. This behavior helps them spot predators and locate food sources like insects and worms in the soil below. The robin's body structure—including its strong legs, balance, and keen eyesight—makes it well-adapted to this hunting behavior. By standing higher, the bird can also watch for threats while foraging, which is essential for survival.

## Core Science Concepts

* Animal Adaptations: The robin has specific body parts (sharp beak, strong legs, keen eyes) that help it survive and find food in its environment.

* Habitat and Environment: Birds live in places with rocks, soil, plants, and insects—all the resources they need to stay alive.

* Animal Behavior: Birds stand on rocks and search the ground to hunt for food, which is an important survival behavior.

* Living Things and Their Needs: Like all animals, robins need food, water, shelter, and a safe place to live.

**Pedagogical Tip:**

Use this image to introduce the concept of "fit" between animals and their habitats. Ask students: "What parts of the robin help it live here?" This builds foundational understanding that animals have features for specific purposes—a concept critical for understanding adaptation at later grade levels.

**UDL Suggestions:**

Provide multiple means of engagement: (1) Have visual learners observe the photo closely and draw the robin; (2) Use tactile activities where students feel different textures (rough rock, smooth rock) to understand the robin's perch; (3) Create an audio recording of robin calls to engage auditory learners. For representation, use both labeled diagrams and unlabeled photos so students can identify parts independently or with support.

## Discussion Questions

1. What body parts does the robin use to find food on the ground? (Bloom's: Remember | DOK: 1)

2. Why do you think the robin is standing on the rock instead of on the ground? (Bloom's: Infer | DOK: 2)

3. How do the robin's legs and beak help it survive in this habitat? (Bloom's: Analyze | DOK: 2)

4. If a robin didn't have a sharp beak, how might its life be different? (Bloom's: Evaluate | DOK: 3)

## Extension Activities

1. Bird Body Parts Hunt: Take students on a nature walk to observe birds (robins, sparrows, pigeons, etc.). Have them sketch or point out different body parts (beaks, feet, wings, eyes) and discuss what each part helps the bird do. Record observations in a simple class chart.

2. Rock Perch Simulation: Provide small toy birds or bird cutouts, rocks of different sizes, and a sensory bin with soil and plastic insects. Let students experiment: Which rocks are best for standing? Can the birds find food from different heights? This builds understanding of why birds choose certain perches.

3. Design a Bird Beak: Provide different tools (clothespins, tweezers, spoons, straws) and small objects to pick up (crackers, cereal, beads). Students use different "beaks" to see which tools work best for different foods, mimicking how different bird beaks are shaped for different diets.

## NGSS Connections

Relevant Performance Expectation:
- 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.

Disciplinary Core Ideas:
- 1-LS1.A Structure and Function: All organisms have external parts. Different animals use their body parts in different ways to see, hear, and move from place to place.
- 1-LS1.B Growth and Development of Organisms: Animals have body parts that help them sense the world around them.

Crosscutting Concepts:
- Structure and Function The robin's body parts (beak, legs, eyes) have specific jobs that help it survive.
- Patterns We observe patterns in where and how robins hunt for food.

## Science Vocabulary

* Beak: The hard, pointed mouth part of a bird used for picking up and eating food.

* Habitat: A place where an animal lives that has all the things it needs to survive, like food, water, and shelter.

* Adapt/Adaptation: A special body part or behavior that helps an animal survive in its home.

* Perch: To sit or stand on something, usually something high like a rock or branch.

* Forage: To search for and find food in nature.

## External Resources

Children's Books:
- Robin Redbreast by Shari Halpern (illustrated board book about robins)
- Birds by Kevin Henkes (simple First Grade introduction to bird characteristics)
- What Do Birds Eat? by Patricia Whitehouse (explores bird diet and beaks)

YouTube Videos:
- "American Robin Facts for Kids" — Brief, colorful overview of robin behavior and diet (Approximately 3 minutes). https://www.youtube.com/results?search_query=american+robin+facts+for+kids

- "Birds and Their Beaks" — Explores how different bird beaks match different foods and habitats (National Geographic Kids, approximately 5 minutes). https://www.youtube.com/results?search_query=birds+and+their+beaks+national+geographic+kids