# Mourning Dove

Life Science | Lesson Guide

1st Grade

## Photo Description

A small brown bird sits on dark soil in a garden. The bird has gray and brown feathers and a small black eye. Green plants and white flowers grow around the bird in the dirt.

## Scientific Phenomena

This image captures the Anchoring Phenomenon of animal habitat selection and foraging behavior. The mourning dove is demonstrating how animals choose specific environments that meet their survival needs. The bird is likely foraging for seeds, insects, or small stones (grit) that help with digestion. This behavior occurs because animals have evolved specific adaptations that help them find food and shelter in environments where they can successfully survive and reproduce.

## Core Science Concepts

1. Animal Needs: All animals need food, water, shelter, and space to survive, and they choose places that provide these things.

2. Habitat Features: Gardens provide birds with food (seeds, insects), water, and materials for nesting, making them good habitats.

3. Animal Behavior: Birds use their senses to find food and safe places, showing how animals interact with their environment.

4. Plant-Animal Relationships: Gardens with plants create homes for many different animals, showing how living things depend on each other.

**Pedagogical Tip:**

Use the "See, Think, Wonder" thinking routine with this image. Have students observe what they see, share what they think is happening, and ask questions about what they wonder. This builds scientific observation skills.

**UDL Suggestions:**

Provide multiple ways for students to share observations: verbal descriptions, drawings, acting out the bird's movements, or using simple sentence frames like "I see..." and "The bird is..."

## Zoom In / Zoom Out

Zoom In: Inside the bird's body, special muscles help move its wings and legs. The bird's eyes can see colors and movement that help it spot food and danger. Its beak is shaped perfectly for picking up small seeds and insects from the ground.

Zoom Out: This garden is part of a larger neighborhood ecosystem where many animals live. Birds like this dove help plants by spreading seeds to new places when they fly. The dove is also food for larger animals like hawks, showing how energy moves through the food web.

## Discussion Questions

1. What do you think this bird is looking for in the garden soil? (Bloom's: Analyze | DOK: 2)
2. How do you think the bird's feet help it walk on the ground? (Bloom's: Apply | DOK: 2)
3. What other animals might live in this garden with the bird? (Bloom's: Create | DOK: 3)
4. Why do you think gardens are good homes for birds? (Bloom's: Evaluate | DOK: 3)

## Potential Student Misconceptions

1. Misconception: "Birds only live in trees and fly all the time."
   Clarification: Many birds spend lots of time on the ground looking for food, and some birds don't fly very much at all.

2. Misconception: "All birds eat the same food."
   Clarification: Different birds have different shaped beaks and eat different foods - some eat seeds, some eat insects, and some eat fish.

3. Misconception: "Animals choose where to live randomly."
   Clarification: Animals carefully choose places that give them food, water, shelter, and safety.

## Cross-Curricular Ideas

1. Math - Counting and Patterns: Have students count the number of plants, flowers, or seeds they see in the garden photo. They can create simple bar graphs showing "How many birds visit our class garden?" or "Which foods do birds like best?" This connects to 1.MD.C.4 (organizing and interpreting data).

2. ELA - Descriptive Writing: Students can write or dictate simple sentences about the bird using sensory words. Use sentence frames like "The bird is ___." or "I see a bird that ___." Create a class book titled "Birds in Our Garden" with student illustrations and descriptions, building writing skills (W.K-1.2) and vocabulary development.

3. Art - Nature Collage: Students create a garden habitat collage using colored paper, natural materials (leaves, twigs, seeds), and drawings of animals. This helps them represent the plants and animals they observe while developing fine motor skills and understanding of habitat composition.

4. Social Studies - Community Gardens: Discuss how gardens help families and neighborhoods. Take a nature walk around the school or neighborhood to observe habitats. Students can map where they see birds and plants, connecting to understanding local environments and community spaces (K-1.G.1).

## STEM Career Connection

1. Ornithologist (Bird Scientist): An ornithologist is a scientist who studies birds and where they live. They watch birds in gardens, forests, and parks to learn about their behavior, what they eat, and how to help keep them healthy and safe. These scientists help protect bird habitats so birds can survive.
   - Average Annual Salary: $65,000 - $75,000 USD

2. Landscape Designer/Gardener: A landscape designer plans and creates beautiful gardens and outdoor spaces. They choose which plants and flowers to plant so that birds, butterflies, and other animals have food and homes. They understand what different animals need to survive in a garden.
   - Average Annual Salary: $48,000 - $58,000 USD

3. Ecologist: An ecologist studies how animals and plants live together in nature. They observe animals like birds in their habitats to understand how everything in nature is connected. Ecologists help protect forests, gardens, and other places where animals live.
   - Average Annual Salary: $62,000 - $72,000 USD

## NGSS Connections

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 - All organisms have external parts that they use to perform daily functions.
- 1-LS1.D - Animals use their external parts to help them find and take in food, water, and air.

Crosscutting Concepts:
- Structure and Function - The shape and stability of structures are related to their function.

## Science Vocabulary

* Habitat: The place where an animal lives and finds everything it needs to survive.
* Foraging: When animals search for and find food.
* Adaptation: Special body parts or behaviors that help animals survive.
* Environment: All the living and non-living things around an animal.
* Shelter: A safe place where animals can hide and rest.

## External Resources

Children's Books:
- Are You My Mother? by P.D. Eastman
- A Nest Full of Eggs by Priscilla Belz Jenkins
- Birds by Kevin Henkes