

Lesson Plan: Alike and Different: Male and Female Adult Bald Eagles

Grade/Level	Grade Level: 3rd grade
Time Allotment	60 minutes
Content Area(s)	Science and Language Arts

Curricular Connections

Learning Standard: 3-LS4: Biological Evolution: Unity and Diversity

Lesson Overview

Students will compare and contrast male and female bald eagles using a Venn diagram to understand how different traits support survival.

Instructional Materials

- Display method: Large sheet of paper/whiteboard/projector/tablet
 - Markers or pens
 - Pictures or descriptions of male and female bald eagles
 - List of pre-written bald eagle traits (included at end of lesson)
 - Scissors (optional)
 - Tape (optional)
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Introduction

Engage: Go to the Raptor Resource Project classroom page:

<https://www.raptorresource.org/classroom/> and ask students whether the eagle in the nest is male or female. Why do they think that?

Explore: Introduce the concept of comparing and contrasting. Show examples of two objects that are similar and different. Explain that today, they will be comparing and contrasting male and female bald eagles.

Activity and Assessment

Sort Bald Eagle Traits and Behaviors

Before dividing the class into groups, make sure they know that female Bald Eagles are larger than male Bald Eagles. Ask them to keep this in mind as they sort their traits.

- Divide the class into small groups. Provide each group with the included bald eagle traits and behaviors. You can cut them out ahead of time or have students cut out their own. Explain that some are unique to males, some are unique to females, and some are shared by both.
- Instruct students to discuss and sort their traits and behaviors into three categories: "Only Males," "Only Females," and "Both Males and Females."

Build the Venn Diagram

- On a large sheet of paper or whiteboard, draw a Venn diagram with two overlapping circles. Label one circle "Male" and the other "Female."
- Invite students to come up and tape/place their sorted traits and behaviors within the appropriate circles or overlapping 'shared' section.
- Choose some traits or behaviors for discussion. How might they benefit individual bald eagles or the species? For example:
 - Discuss how a female eagle's larger size might help her keep eggs covered during incubation or compete for food with more rapidly developing male eaglets. Her size could help eggs and eaglets survive bad weather and food competition.
 - Discuss how the difference in size between male and female eagles gives parents access to a wider variety of prey. A wider prey base means more food for eaglets even if one food item becomes scarce, increasing their likelihood of survival.
 - Discuss how the shared behavior 'feeds young' allows male and female eagles to defend and protect their young while providing plenty of food, since one parent can protect eggs and eaglets while the other hunts.
 - Discuss how one parent can care for eaglets if the other parent dies.

Wrap-up and Assessment

- Briefly review the key takeaways from the lesson: that male and female bald eagles have some unique traits and some shared traits, and that these traits play a role in their survival and reproduction.
- Have students individually write a short paragraph explaining how one specific trait or behavior (of their choice) helps bald eagles survive and reproduce.
- As an alternative assessment, allow students to create their own Venn diagrams comparing and contrasting other animals or objects.

Differentiation

- For students who need more support, provide pictures or models of male and female bald eagles to reference while sorting traits.
- For advanced students, encourage them to research other interesting comparisons, such as Golden versus Bald Eagles or Bald Eagles in different habitats.

Extension

- Have students write a fictional story from the perspective of a male or female Bald Eagle describing how their unique traits help them survive in their habitat.
- Invite a guest speaker from a local wildlife organization to talk about Bald Eagles and conservation efforts.
- Continue to watch and observe the behavior of male and female eagles in their natural habitat: <https://www.raptorresource.org/classroom/>.

Weighs between 8 and 10 pounds	Weighs between 10 and 14 pounds	Catches prey	Wingspan of 6-7 ½ feet
Found across North America	Lays eggs	Brown body	Wingspan of up to 8 feet
Feeds young	Perches in trees	White head	Incubates eggs
Larger	Chases intruders	Hooked beak	Curved talons
Regurgitates feathers, fur, and bones	Builds its nest in a tall tree	Smaller	Three eyelids

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Answer Key

Male	Female	Both	Male
Both	Female	Both	Female
Both	Both	Both	Both
Female	Both	Both	Both
Both	Both	Male	Both

Identifying the Resident Female and Male Bald Eagles at the North Nest

