

Finding A Dove for Gramps

By Lisa J. Amstutz

Lesson Plan and Activity Guide Including Citizen Scientist Activities



Introductory Lesson

Bird Characteristics

General Objectives

Students will:

- Classify plants and animals according to the physical characteristics that they share.
- Give examples of how changes in the environment (drought, cold) have caused some plants and animals to die or move to new locations (migration).
- Recognize that many animals can survive harsh environments because of seasonal behaviors.
- Students will pose questions, listen to the ideas of others, and contribute their own information or ideas in group discussions or interviews in order to acquire new knowledge.

Materials Needed:

- One Copy of *Finding a Dove for Gramps* by Lisa J. Amstutz
- Chart paper or whiteboard and markers
- Bird or Not? Activity sheet

Lesson Directions

1. Talk to the children about the animals they see in their neighborhoods. Ask them to list different animals and write those animals on the chart paper (example: worms, butterflies, squirrels, rabbits, birds, etc.).
2. Explain that scientists want to know how many kinds of animals live in an area. The more variety there is, the healthier the environment. Scientists ask everyday citizens to help them count the animals. Every winter there is a Christmas bird count to see how healthy the bird population is. (There is back matter about the Christmas Count in *Finding a Dove for Gramps*.)
3. Explain that you are going to read a story about a bird count, then read the book *Finding a Dove for Gramps* aloud.



4. Explain that birds live on every continent. They are an important part of the ecosystem and are a special class of animals called Aves. You will be learning about birds and how to be a citizen scientist.
5. Return to the list of animals that the children listed before. Ask them to explain how a bird is different from the other animals. Label this list **Characteristics of Birds**. Help the children to come up with the following characteristics – feathers, wings, beak or bill, lay eggs, breathe with lungs, have a backbone and skeleton. Remind children that not all birds fly.

Bird or Not? Activity Sheet

Divide the children into groups of three or four. Have them work together to fill out the sheet. If they do not know whether an animal should be classified as a bird, have them look up the information online or in library books.

Good online resources for animal classification:

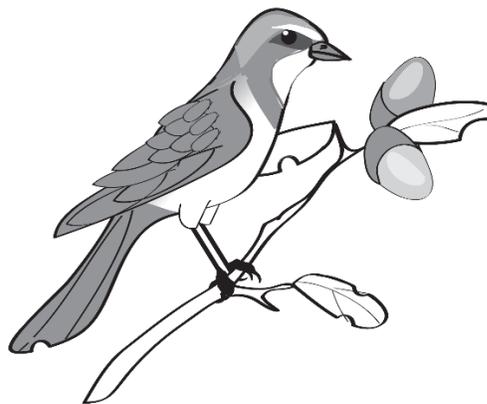
<https://www.dkfindout.com/us/animals-and-nature/birds/>

https://www.sheppardsoftware.com/content/animals/kidscorner/classification/kc_classification_birds.htm

<https://www.ducksters.com/animals/birds.php>

Class Discussion

After the students have completed their worksheet, have them discuss their answers with the rest of the class. Go back over the characteristics of a bird. Tell the children they will be learning more about birds and their characteristics.



Bird or Not?

Name _____

Birds are members of Class Aves.

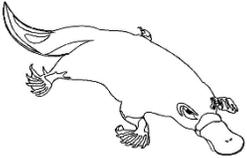
They have – feathers, wings, lungs, vertebrae and skeleton, a beak or bill, are warm-blooded and lay eggs.

Investigate the following animals and decide if they are birds or not. Use the box to list the reasons they should or should not be in Class Aves.

Penguin



Platypus



Ostrich



Bat



Bird Migration Lesson

General Objectives

Students will:

- Recognize that many animals can survive harsh environments because of seasonal behaviors.
- Recognize that plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death.
- Classify plants and animals according to the physical characteristics that they share.
- Give examples of how inherited characteristics may change over time as adaptations to changes in the environment that enable organisms to survive.
- Students will demonstrate their powers of observation, abstraction, invention, and expression in a variety of media, materials, and techniques.

Materials Needed

- *Finding A Dove for Gramps* by Lisa J. Amstutz
- YouTube video – <https://www.youtube.com/watch?v=CwIT9pv4khw>
- Bird Observation Worksheet
- Colored pencils



Lesson Directions

Hold up the book *Finding A Dove for Gramps* and ask for volunteers to retell the story that they heard yesterday. Assist them by showing pictures from the book.

Ask the class what season is depicted in the book. Discuss the characteristics of winter (cold weather, no plant growth, short days, water sources can be frozen). Explain that some birds have special adaptations for winter. They migrate to a warmer climate.

Show the Bird Migration Video - <https://www.youtube.com/watch?v=CwIT9pv4khw>

Discuss the video with students:

1. Why do birds migrate?
2. Where do they migrate?
3. What problems do birds encounter in migrating?
4. How can humans help birds?

Explain that the story *Finding A Dove for Gramps* takes place during a bird count. This is where citizen scientists count the number of different bird species living in an area. Tell the students that they will be practicing today by doing a schoolyard bird observation.

Pass out the worksheets and assign the students to work in pairs. They are to sketch the birds that they observe and try to record the number of each kind of bird they see. Remind them to strive for scientific accuracy and not to make it a race or contest.

Have the students save their worksheets for the next lesson.



Bird Observations

Name _____

Date _____

Sketch each type of bird you see in a separate box. Try to record the markings accurately. This will help you to identify the birds later.

Number of this type observed _____

Bird Identification Lesson

General Objectives

Students will:

- Classify plants and animals according to the physical characteristics that they share.
- Students will pose questions, listen to the ideas of others, and contribute their own information or ideas in group discussions or interviews in order to acquire new knowledge.
- Students will demonstrate their powers of observation, abstraction, invention, and expression in a variety of media, materials, and techniques.
- Students will pose questions, listen to the ideas of others, and contribute their own information or ideas in group discussions or interviews in order to acquire new knowledge.

Materials Needed:

- Student's bird observation sheets from previous lesson.
- Access to the bird identification website: <https://backyardbirdingblog.com/backyard-bird-identification-guide/> or <https://www.aastateofplay.com/50-bird-species-sounds-they-make/>
- Stale bread or toast – one slice for each child
- Plastic sandwich baggies
- String or yarn
- Large bag of bird seed
- Can of lard or Crisco
- Plastic knives



Lesson Directions

Explain that you will be learning about the birds that live in your area. Some of the birds will stay year-round and others will migrate. All birds are helpful to the environment by eating harmful insects, helping to spread seeds (often through poop), and helping to pollinate plants.

Today the students will look at pictures of birds and try to match them with the drawings and observations of birds from yesterday. Have partners work together to identify the birds they observed.

Provide time for each team to tell about the different birds they think they have seen.

Explain that different birds are attracted to different habitats. Water birds need a pond or source of water for swimming and fishing. Songbirds like bushes and trees to nest and find shelter. You can attract different bird by providing food and water for them.

Activity – Bird Feeders

Tell the students that today they are going to create bird feeders to attract birds to the schoolyard or their own back yard.

Give each child a slice of stale bread or toast.

Have them poke a small hole in one corner of the bread. Use this hole to thread the string through. Tie the string so that there is a circle of thread that makes a loop for hanging the feeder on a tree limb.

Students will use the knife to spread lard or Crisco on both sides of the bread.

Have students coat the bread in birdseed until all the lard or Crisco is covered.

Ask if some children would like to hang their bread feeders in the schoolyard so they can observe the birds while at school. (Have a few extra bread feeders on hand just in case there are no volunteers.)

Instruct them to put their bread bird feeder into the plastic bag and take it home to hang up at their house. This will give the birds a great snack and will give the students the opportunity to observe birds at home.

Citizen Science Project Lesson

Enroll your students in a real science project hosted by Cornell University.

General Objectives

Students will:

- Pose questions, listen to the ideas of others, and contribute their own information or ideas in group discussions or interviews in order to acquire new knowledge.
- Demonstrate their powers of observation, abstraction, invention, and expression in a variety of media, materials, and techniques.
- Recognize changes in appearance that animals and plants go through as the seasons change

Materials:

- Access to website *Celebrate Urban Birds* - <https://celebrateurbanbirds.org/cub/instructions>
- Paper and pencil
- Outside observation area approximately 50 ft. × 50 ft.
- This will take ten minutes of observation for three different days.
- *Copy of Finding A Dove for Gramps* by Lisa J. Amstutz
- Chart Paper



Lesson Directions

Go to the *Celebrate Urban Birds* website to enroll your class as a group of citizen scientists. The site also has information about birds in your area. <https://celebrateurbanbirds.org/learn/birds/fs/>

Explain to your class that they will be participating in a bird count just like the boy in *Finding A Dove for Gramps*. If you have time – reread the book.

Tell the students that they are enrolled in a study being done by [Cornell University](https://www.cornell.edu) to learn about the number and type of birds that live in urban areas.

Explain that science studies have set rules so that scientist can get good information. The rules in this study are that they will observe the same area at the same time of day for three days. The observation time is ten minutes. They are to record only the birds they see in those ten minutes. Then the information will be sent to Cornell University to assist in their bird count.

It is important to be accurate and not to make up any birds. Seeing ZERO birds is just as important to the scientists as seeing many birds.

Take the students outside to your predesignated area. Make sure the students understand boundaries of the area they are going to observe. Have them sit quietly for 10 minutes to observe the birds and make their recordings.

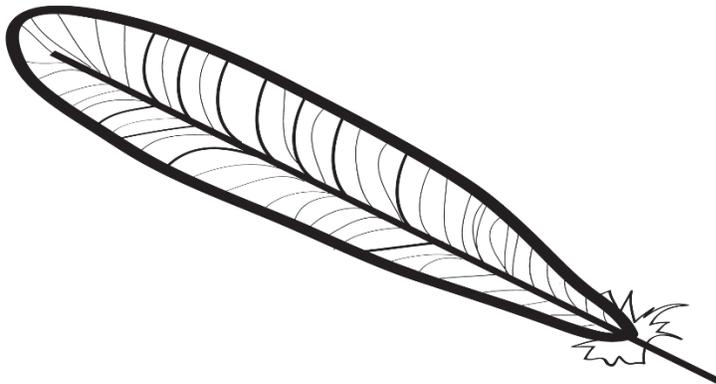
Return to the classroom and discuss the number of birds that were observed.

Send your information to the CUB project.

You can also show the student the collected data and species that have been reported in the program.

Collect the data for three days and record each day's information on a piece of chart paper. Have the student discuss any differences they noticed in the observations. Did the weather make a difference? Were there noises or activity that changed the number of birds? What other parts of the environment affect the number of birds?

Discuss ways to help the birds in your community.



Bird Appreciation Poster Lesson

Unit Review

General Objectives

Students will:

- Recognize that many animals can survive harsh environments because of seasonal behaviors.
- Recognize that plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death.
- Classify plants and animals according to the physical characteristics that they share.
- Give examples of how inherited characteristics may change over time as adaptations to changes in the environment that enable organisms to survive.
- Students will demonstrate their powers of observation, abstraction, invention, and expression in a variety of media, materials, and techniques.

Materials

- Large piece of paper for each student
- Markers, pencils, crayons
- Information from previous lessons
- Book - *Finding A Dove for Gramps* by Lisa J. Amstutz

Lesson Directions

Review with the class the information they have learned about birds.

Bird Characteristics – wings, feathers, lay eggs, warm-blooded, beaks or bills, lungs, vertebrates

Bird Migration

Identifying Birds – different species

You can also show this bird video to help with the review: Five Facts about Birds -

https://www.youtube.com/watch?v=awWr2_dfcuk

As the class what they find most interesting about birds.

Poster Activity

Tell the student that they will have the opportunity to make a bird appreciation poster. They are to tell the world why birds are interesting animals and why humans should appreciate them. Challenge them to include at least three bird facts on their poster.

When posters are completed have each student tell about their poster and display them for the public to view.

