



Birds in My Backyard

Grade Span	K-2 Life Science
Time Span	10 Sessions (30-45 minutes each) <ul style="list-style-type: none"> • 5 in winter • 5 in spring
Standards	<p>Make observations of plants and animals to compare the diversity of life in different habitats.</p> <p>Develop and Use Models</p> <p>Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.</p> <p>Classify objects into given categories; count the numbers of objects in each category and sort the categories by count</p> <p>Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.</p>
Focus Question	How can we describe the characteristics of birds and use their characteristics to identify them?
Overview	Students will learn about common tools used by naturalists (binoculars and spotting sheets). They will then use them to practice observation skills, identify local bird species and create their own class book of birds local to their school.
Objectives	<p>Students will be able to accurately describe the characteristics of a variety of bird species.</p> <p>Students will understand that scientists use tools.</p> <p>Students will be able to use a spotting sheet to identify native bird species.</p> <p>Students will be able to describe birds they see to others.</p> <p>Students will compare and contrast characteristics of common native bird species.</p>
Materials Needed	<p><u>Birds in My Backyard Supplemental Materials (Below)</u></p> <p>An area with trees within walking distance of your location.</p> <p>Winter Only Materials:</p> <p>Bird Feeder that can be seen from the window (Platform Feeder Recommended)</p> <p>Bird Feed</p> <p>Spring Only Materials:</p> <p><u>Homemade binocular instructions</u></p> <p>3 toilet paper tubes per child</p> <p>Duct tape</p> <p>String / yarn</p> <p>Scissors</p> <p>Hole punch</p> <p>Scotch Tape (optional)</p>
Vocabulary	<p>Species</p> <p>Binoculars</p> <p>Spotting Sheet</p> <p>Characteristics</p> <p>Observation</p>



<p>Teacher Prep</p>	<ul style="list-style-type: none"> • Find a bird feeder set up that your students can easily observe in winter. • Collect all materials for making binoculars. • Prepare student journals using the journal pages from the Birds in My Backyard Supplemental Materials you prefer. • Optional: Collect books about birds and bird watching to build connections about the learning to be done together.
<p>Background</p>	<p>Read books about birds or bird watching. Examples:</p> <ul style="list-style-type: none"> • Little Birder: A Field Guide to Birds of the Alphabet by Jessalyn Claire Beasley • Look Up: Bird-Watching In Your Own Backyard by Annette LeBlanc Kate
<p>Procedure</p>	<p>Winter Lessons</p> <p>Engage: Introduce bird species cards. Have students play Memory and/or Guess My Species using the cards. (See supplemental materials for instructions.) After building their ability to describe the characteristics of a bird clearly, let students know that scientists observe animals closely and use the characteristics they see to learn about them.</p> <p>Explore: Let students know that one tool scientists use are spotting sheets. Introduce the spotting sheet from the supplemental materials. Let the students know that when scientists observe closely, they pay attention to all the details of what they see and use that information to determine what they are looking at. Let students know they will be doing this by observing a bird feeder out the window. Post the spotting sheet near the window so students can practice observing and comparing the characteristics of what they see.</p> <p>Explanation: Scientists keep their own observations in a journal. Have students draw the birds they find each day. (In the supplemental materials there are 2 journal options.) After a few days of entries, share that scientists and naturalists share their findings then have them share their entries with a partner.</p> <p>Extension: Use the bird sightings graph from supplemental materials to keep track of bird sightings as a class. Compare data from week to week or day to day.</p> <p>Spread out the bird species cards for students to see. Ask them what they observe about the birds' beaks. Do you think the birds' beaks can teach us anything about what they eat? How?</p> <p>Have students complete the Bird beak lesson and extend into discussion about what other types of bird feeders they've seen and how bird beaks might impact the birds that visit the class feeder.</p> <p>https://www.vanderbilt.edu/cso/Bird_Beaks_Lesson_Plan.pdf*</p> <p>It may also be helpful to download the Merlin app to help with identifying species. The second journal option mirrors the questions used in Merlin to identify bird species.</p> <p>Spring Lessons</p> <p>Engage: Bring in a pair of binoculars or show an image of someone using binoculars. Ask students what they think they are used for. How do they work? Why and where might they use them? Who do they think uses them?</p>



	<p>Explore: Let students know that scientists use tools like binoculars to make close observations. Have each child make their own set of paper tube binoculars. Have them practice spotting different objects in the classroom or outside that do not move so they are ready to spot birds which may move. Take students outside to look for birds.</p> <p>Explanation: After students have practiced using their binoculars on a few walks outdoors, remind them that scientists keep track of their observations in a journal. Have students use the journal pages from supplemental materials to keep track of their bird sightings. Have students share their journal entries with a partner and put journal entries together to create a class book of local bird sightings. Encourage students to use the spotting sheet from winter to identify some of their birds. When they come across birds not included on the spotting sheet, encourage students to answer the questions from the second journal option. You can use these questions to introduce the Merlin app for bird identification.</p> <p>Extension: Have students make a class spotting sheet with additional bird species they find regularly. Make your own class data sheet similar to that used in winter to track sightings of other bird species.</p> <p>It may also be fitting to use the bird sound recordings from the Merlin app to explore ways of identifying birds auditorily.</p> <p>Begin a regular “sit spot” practice daily or weekly to spend 1-5 minutes in the same space outside while students practice mindful listening and seeing.</p>
<p>Wrap-Up</p>	<p>Winter Evaluation:</p> <p>Formative Assessment: Student journal entries</p> <p>Summative: Winter Checklist (see below)</p> <p>Spring Evaluation:</p> <p>Formative Assessment: Student journal entries</p> <p>Summative: Spring Checklist (See below)</p>



Winter Checklist

Student Name	Student uses spotting sheet effectively.	Student identifies at least 3 characteristics of a bird when describing it.	Student can identify at least 1 similarity and 1 difference between 2 bird birds.	Notes



Spring Checklist

Student Name	Student can identify the size, color and location of a bird they observe.	Student can accurately describe what a bird is doing and represent this with a picture and words.	Student can compare two quantities using a histogram using the terms more/greater and less/fewer..	Notes



MY BIRD NOTEBOOK

DRAW A BIRD YOU SEE

Draw a diagram of a bird you see today. Remember to label the parts that make this bird special.

A large, empty rectangular box with a thin black border, intended for drawing a bird.

I think this bird is a...



MY BIRD NOTEBOOK

OBSERVE A BIRD CLOSELY

Draw a diagram of the bird you saw today. Remember to label the parts that make this bird special.

Bird Observations	Student Answer
Where did you see the bird?	
When did you see the bird?	
What size was your bird?	
What were the main colors?	
What was the bird doing?	

I think my bird is a _____

Draw a diagram of the bird you saw today. Remember to label the parts that make this bird special.



MY BIRD NOTEBOOK

COUNT THE BIRDS YOU SEE

Number of birds you see

10							
9							
8							
7							
6							
5							
4							
3							
2							
1							
	Song Sparrow 	European Starling 	American Crow 	Northern Cardinal 	Mourning Dove 	Grey Catbird 	Blue Jay 

Bird Species



MY BIRD NOTEBOOK

Bird Species Playing Cards

Song Sparrow



Northern Cardinal



Blue Jay



European Starling



Mourning Dove



Black-capped Chickadee



American Crow



Grey Catbird



Dark-eyed Junco





Teacher Resources:

Bird Species Card Games:

Memory:

Set Up:

1. Print 2 sets of the bird cards and cut apart.
2. Place the cards face down in rows between 2 players.

How to Play:

The first player chooses a 2 cards and turns them over so both players can see. If there 2 cards match, then the player keeps the cards and takes another turn. If the cards do not match, the player turns the cards back to face down and player two takes a turn. A player may only make 2 matches in a row before giving the next player a turn.

Once all cards are matched, each player counts their cards. The player with the most cards is the winner.



Guess My Species: (Similar to Guess Who)

Set Up:

1. Each pair of students will need 3 sets of species cards printed and cut out. One of the sets should be labelled with an "S" on the back to identify them as the secret species cards.
2. Two players sit across from each other with a divider between so they cannot see each other's cards.
3. Each player spreads out 1 set of bird species cards face up. Each player also selects one of the Secret Species cards from the S deck to be their secret species. They put that card to the side.

How to Play:

Players take turns asking each other yes/no questions about the other player's secret species. (Ex: Is your bird blue? Does your bird have more than one color?) As their questions are answered, each player flips their set of cards over eliminating options until they are left with one card. They then show it to their opponent to see if they have identified the secret species.