



Science

Lesson 4: Backyard Bird Counting

Science Category:

Life Science

Activity Goal:

Students participate in a nature walk to count local birds by color and document their findings on a chart.

Overview:

Students observe local birds in order to identify the different color variations they may see in nature. First, students participate in a nature walk and count birds by color. Students then collaborate to complete a bar graph and make observations about the colors of birds they saw. Last, the students create their own bird example and describe its appearance to the class using a "Backyard Bird" worksheet.

Teaching Sequence:

This lesson is part of a four-lesson series, which is intended to be taught in the following order:



Materials:

Provided:

- Sequence strip or large sequence panels
- "Bird Counter" worksheet
- "My Backyard Bird" worksheet (optional)
- Science safety poster

Needed:

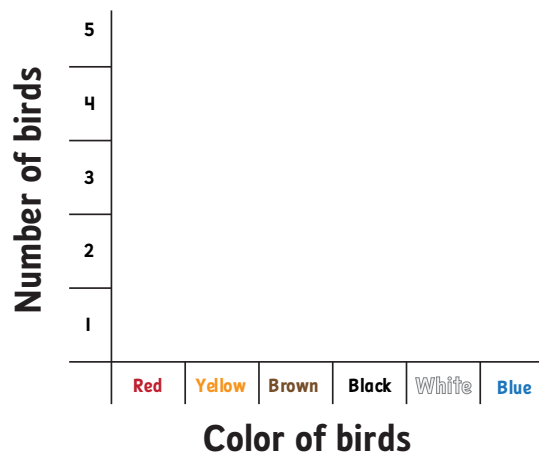
- Pencils (1 per student)
- Clipboards (1 per group leader)
- Large chart paper
- Tape
- Glue bottles
- Scissors
- Construction paper (red, blue, brown, black, yellow, and white)
- Crayons, markers, or colored pencils
- Assortment of colored craft feathers (optional)

Safety Note:

It is recommended that all science experiments and activities be conducted only under adult supervision. Adults should handle or assist with all materials. Please check with your school's administration to see if science materials are approved for use in the classroom.

Preparation:

- I. Print, laminate, and cut out:
 - a. Sequence strip or large sequence panels
 - b. Science safety poster (if not already prepared)
2. Choose to prepare the traditional-sized sequence strip or use the large sequence panels to create a larger sequence strip by arranging the images in order, taping them together, and laminating.
3. Optional: If choosing to complete the extended learning activity, print one copy of the "My Backyard Bird" worksheet per student.
4. Print one "Bird Counter" worksheet per group of students.
5. Prepare a group data chart and observation area (see the example below):
 - a. Orient the chart paper vertically.
 - b. Using the black marker, label the chart "Backyard Birds." Draw an L-shaped graph and label the vertical line as "Number of birds" and the horizontal line as "Color of birds." On the horizontal line, use the colored markers to write the colors of birds (e.g., use a red marker for "red") spaced evenly along the line (red, blue, brown, black, yellow, and white). On the vertical line, using the black marker, write the numbers 0–5 starting at the bottom corner, spaced evenly to the top of the line. See the reference chart below.
 - c. Tape the chart on the wall in an area easily accessible to students.
 - d. Cut out at least five squares of each colored construction paper (red, blue, brown, black, yellow, and white) and place them in a bowl or basket. The squares should all be around the same size and fit the graph when lined up with the numbers on the vertical line (e.g., one red square equals one red bird observed).



Color of birds
Group data chart example

6. Gather other materials needed for the activity (i.e., scissors, glue, pencils).
7. Have the sequence strip or sequence panels on hand, and refer to them throughout the activity to guide the students.

Suggestions for Differentiation:

Level 1

- Provide the cue “do this,” and model the action.
- If needed, model requesting help, and encourage the student to imitate using their mode of communication.
- If completing the extended learning activity, have the student select 1–2 colors and/or feathers to use on the worksheet:
 - Color half of each “color” box for the student and prompt them to complete the remaining half with the same color.
 - If using the feathers, model squeezing out three dots of glue and have the student place the feather on the glue. Allow the student to complete both glue and feather steps for the next color. Assist as needed.
 - Circle in dots the number of colors used and have the student trace the circle.
 - Write a descriptor word in dots and have the student trace the word to complete the sentence.

Level 2

- Explain the activity using one-step directions, and teach the student to reference the sequence strip when needed.
- Encourage the student to ask for help when needed using their mode of communication.
- Have the student complete the extended learning activity:
 - Assist in reading and explaining the worksheet in one-step directions as needed.

Level 3

- Explain the activity using multi-step directions.
- Have the student act as a student leader and assist other students in counting their number of birds from the “Bird Counter” worksheet.
- Prompt the students to assist peers in finding the corresponding number of colored squares to tape on the graph.
- Encourage the student to describe their observations using descriptive language and complete sentences while using their mode of communication.
- Have the student complete the extended learning activity independently, using the teacher model as a reference.



Count the checks for one color

Red	✓	✓	✓						
Yellow									
Blue			✓						
Brown			✓						
Black									
White									

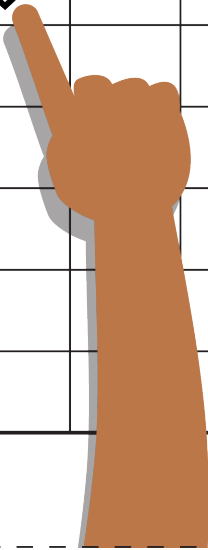
Count out the squares

Add the squares to the graph



Count the checks for one color

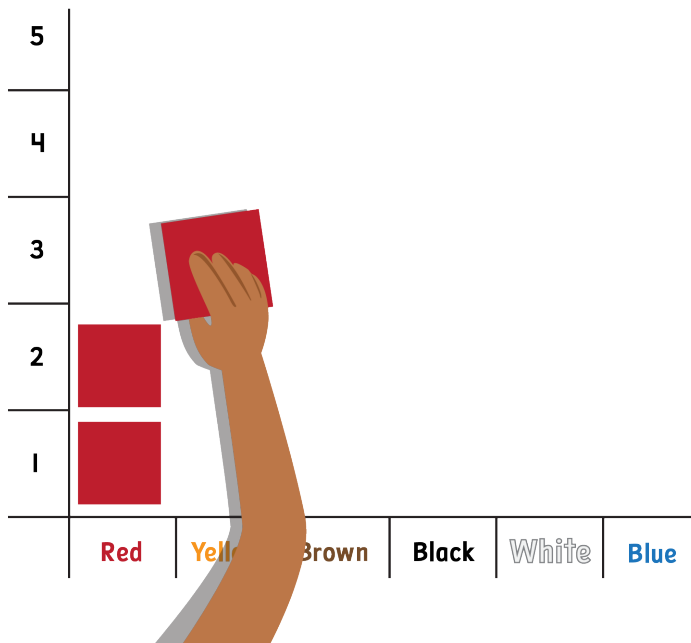
Red	✓	✓	✓		
Yellow					
Blue	✓				
Brown	✓				
Black					
White					



Count out the squares



Add the squares to the graph



Group names:

Bird Counter Worksheet

Put a checkmark (✓) in the box next to each colored bird that you see on the nature walk.

Red					
Yellow					
Blue					
Brown					
Black					
White					

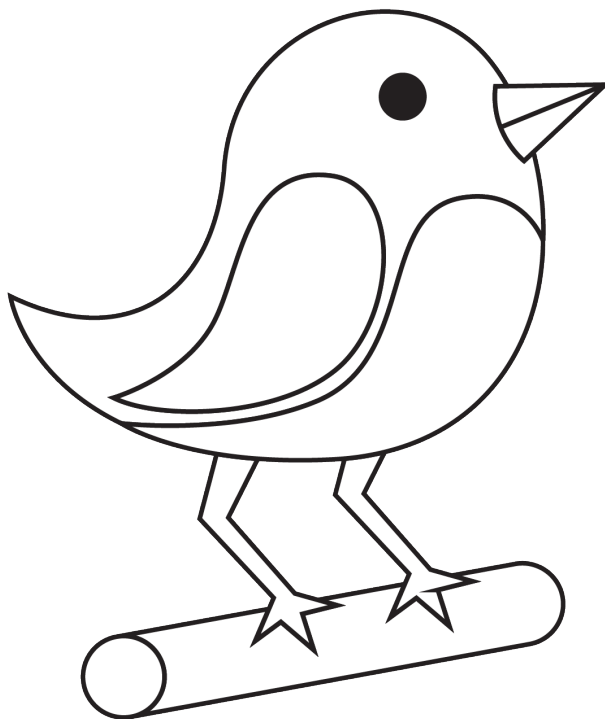
Name:

--

My Backyard Bird

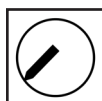


Color the bird.



Color the boxes with the color(s) you used.

Red	Yellow	Blue	Brown	Black	White
-----	--------	------	-------	-------	-------



Circle the number of colors you used.

1	2	3	4	5	6
---	---	---	---	---	---

Science Safety Poster



Protect your eyes



Listen to the teacher



Stand a safe distance from the experiment



Touch with permission



Wash hands after the experiment