Neighborhood Bird Observer



Scientists conduct observations to collect data. We can answer many questions about animals by observing them carefully for an extended amount of time. Observing animals helps scientists develop an understanding of the different behaviors and needs of an animal. By monitoring animal behaviors, scientists can learn how an animal interacts with its surrounding environment and what it needs to survive. Scientists can also learn how changes in the environment affect an animal's health and well-being. Today, we will observe some local birds to learn more about them.

At the end of each of the explorations in this activity sheet there are data sheets so you can record your predictions and results (pages 4, 8 and 11). Print and fill out the data sheets as they are, or cut and glue them into your science journal or copy their contents directly into your science journal. If you have not created a science journal but would like to, instructions can be found at sheddaquarium.org/stayhome.

These activities are designed for families with children in grades 3-5. Educators can see an overview of all activities and classroom recommendations at sheddaquarium.org/files/ penguin-teachers-guide.

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MATERIALS

- Science journal, notebook, or paper
- Writing and coloring devices: Pencil, pen, markers, crayons, or colored pencils
- Timing device: Stopwatch, kitchen timer or phone with timer
- \cdot Ruler
- \cdot Scissors
- \cdot Tape or glue





PREPARATION AND PREDICTION PART 1/2

Making predictions is a big part of what scientists do. Scientists make predictions so that they can lay out their goals and expectations before beginning their experiment.

Step 1 · Science journal: Gather your materials. Print out the 'Preparation and Prediction' science journal page on page 4 and glue it into your science journal, or copy its contents down by hand as we go along.





PREPARATION AND PREDICTION PART 2/2

Step 2 · Science Journal: In your science journal or on a separate sheet of paper, make a list of all the behaviors you can think of that a bird might exhibit.



Step 3 · Science Journal: Predict which bird behaviors you will observe the most. Choose from your own list, or add in these examples:

Inactive (resting or sitting)

- Parenting (nesting, feeding young)
- Moving (walking, flying or hopping)
- Vocalizing (chirping, screeching)
- Preening (feather care, bathing)
- Foraging (searching for food)

Step 4: Consider how to be an expert observer! Think about how your actions might influence a bird's behavior.

- Do you need to remain still and quiet?
- How might noise or swift movements affect the bird's behaviors?

You're ready to begin observing a bird in your neighborhood! Go to page 5 to begin your exploration and observation.



Print and cut out this data sheet to add to your science journal or copy your own version onto a blank page.

STAY HOME WITH SHEDD AQUARIUM NEIGHBORHOOD BIRD OBSERVER



PREPARATION AND PREDICTION

Prediction: Make a list of at least six behaviors you can think of that birds exhibit (some examples below)

SHARE WITH US!

We want to see your observations! Take a picture of your notes, drawings or datasheets and share it with us **@SheddLearning** using **#StayHomeWithShedd**.

Prediction: Predict which of the bird behaviors above you will observe the most.







A scientist explores their subject and uses observations to test out the questions they came up with and the predictions that they made during their preparation phase.

Step 5 · Science journal: Print out the 'Exploration and Observation' science journal pages on page 8 and glue them into your science journal so that they are on pages facing each other. You may also copy these pages into your science journal or onto a piece of paper.

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Step 6 · Science Journal: In your journal, write the 5–6 key behaviors that you selected in step 3 along the top row of the observation data table. Grab a pen and your science journal or hand-copied worksheets and get ready to explore!

Step 7: Take a walk outside or find a window in your home where you can begin your observations.



EXPLORATION AND OBSERVATION PART 2/3

Step 8 · Science Journal: If you can, select one bird to observe. If you are unsure of what bird species you are observing, you can download and use the Merlin Bird ID App or search for it at allaboutbirds.org.



Step 9 · Science Journal: Record the following in your science journal:

- The date, time and location of your observation
- The weather (sunny, cloudy, partly cloudy, raining, snowing, fog)
- \cdot The outside air temperature
- Bird species (if you're not sure, write your best guess)
- A description of the bird (size, color, beak shape, feet, feathers, etc.)





Step 10 · Begin Your Observation: Set a timer for 5 minutes or have someone assist you with tracking time. *Every 30 seconds record the behavior(s) exhibited by the bird by placing a check mark or 'x' in the appropriate column.* Only check off behaviors at thirty second intervals! Your bird might be doing other things during the thirty seconds, but we are only going to record what they are doing at specific intervals. If your bird is doing something that isn't one of the behaviors on your sheet, jot it down in the 'notes' area.



• If your bird flies away, repeat your observations with a new bird until you have observed a single bird for at least half the time.

Step 11 · Science Journal: At the end of five minutes, make any special notes in your journal about your observations and circle the most commonly and the least frequently observed behaviors that you recorded in your Observation Data Table.

It's time to reflect on the results of your observation. Go to page 9 to begin the reflection and analyze the data that you collected.

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STAY HOME WITH SHEDD · PENGUIN ACTIVITY Neighborhood Bird Observer





After gathering data, scientists look for patterns and trends to better understand the subject of their research. Sometimes they learn things that can help to answer the questions they made in their predictions, and sometimes more research is needed to answer new questions.

Step 11 · Science journal: Print out the 'Reflection' science journal page on page 11 and glue it into your science journal after the 'Exploration and Observation pages. You may also copy this page into your science journal or onto a piece of paper.

Step 12 · Science Journal: In your journal on the page opposite the 'Reflection' science journal page, draw the bird you observed performing the behavior you saw the most or found most interesting during your observation. If you are not using a science journal, you may draw on a piece of paper or in a notebook.







Final Step · Science Journal: Find a family member or friend to communicate your findings with and dive deeper into a discussion about the birds in your community. Using data from your observation sheet as a starting point, answer the following questions in your science journal:

- Did you notice that your behaviors affected the bird's behaviors? If so, how?
- If you observed the bird eating, where was it getting its food from? What other foods do you think that bird eats?
- Did the bird prefer to stay low on the ground, high in a tree, or in shrubs? Why do you think that is?
- How did your bird behaviors differ from the penguin behaviors you viewed in the Stay Home with Shedd video?

You've completed your observation! If there were any behaviors you observed that inspired you to want to research further, jot them down in your science notebook to follow up on later! Scientists and researchers often conduct multiple rounds of exploration and observation as they study an animal and its habitat; during different seasons, in different locations, sometimes even studying an animal's descendants..





Print and cut out this data sheet to add to your science journal or copy your own version onto a blank page.

STOY HOME WITH SHEDD AQUARIUM NEIGHBORHOOD BIRD OBSERVER



Did you notice that your behaviors affected the bird's behaviors? If so, how?

If you observed the bird eating, where was it getting its food from? What other foods do you think that bird eats?

Did the bird prefer to stay low on the ground, high in a tree, or in shrubs? Why do you think that is?

How did your bird behaviors differ from the penguin behaviors you viewed in the Stay Home with Shedd video?

ON THE NEXT PAGE DRAW THE BIRD YOU OBSERVED PERFORMING A BEHAVIOR

SHARE WITH US!

We want to see your observations! Take a picture of your notes, drawings or datasheets and share it with us **@SheddLearning** using **#StayHomeWithShedd**.