

4th Grade ToolKit: Birds, Birds, Birds (Adaptations) Lesson Plan

Introduction:

This is a two-part lesson. Lesson one focuses on bird beaks, exploring the relationship between a bird's beak and its ability to find food and survive in a given environment. Students should be encouraged to explore how various organisms satisfy their needs in the environments in which they are typically found. They can examine the survival needs of different organisms and consider how the conditions in particular habitats can limit what kinds of living things can survive. Studies of interactions among organisms within an environment should start with relationships that students can directly observe. Students should look for ways in which organisms in one habitat differ from those in another and consider how some of those differences are helpful to survival. The second part of this lesson is the Jordan River EcoWalk. The students will get a chance to use real binoculars and observe interactions between living and nonliving things in their own backyard. Students will see birds, nests, trees, wildflowers, plants, clouds, and other wildlife and record those findings in their journal.

Objectives:

- Students will be able to examine how bird beak type relates to diet.
- Students will be able to differentiate which type of bird beak would be best suited for a particular environment. (3)
- Students will be able to analyze various birds' beaks and the beaks' correlation with habitat and diet.
- Students will be able to list ways to identify birds, including bird characteristics
- Identify common Utah wetland birds
- Understand how certain characteristics help birds survive in a specific environment.

Duration: 60 minutes

Materials and Resources:

- Bird Beaks Record Sheet (make copies)
- Unique Beak Physique worksheet (make copies)
- "Stomachs" Plastic cups
- "Beaks" – spoon, chopsticks, and tweezers
- "Food" – marbles, plastic chips, toothpicks
- Binoculars
- Jordan River EcoWalk cards

Activities:

- Battle of the Beaks
- Jordan River EcoWalk

Assessments:

Activity 1:

Discussion: After students have recorded results, ask each student to provide you with the total amount of good collected by each beak, which you can record on the blackboard or using the Bird Beaks Record sheet. Add up all the students' totals for each beak type and then ask students to make a graph using these totals. There should be a different colored bar for each food type. The three different bird beaks should be displayed on the X axis, with amount of good on the W axis.

- Which beak collected the most of which food item?
- What do you think would happen to your bird if only one food item was available?
- Which of the beak types feed most successfully on which food item?
- Was one beak type successful with more than one food item?
- Did your earlier observations about beak types help you to understand how birds feed side by side but utilize different food items?

Drawing: Assign each students a specific food such as fruit, nuts, pizza, or a milkshake and have them draw a bird that would be best suited to survive in an environment where that food exists.

Activity 2

Discussion: When you return to the classroom give the students time to finish their field notes from the Ecological walk. Then as a class share ways they learned to identify birds:

- What characteristics were the easiest to spot?
- Did they notice some birds had longer beaks than others?
- What techniques did they use to identify the birds?

Research: Have students research a bird they saw on the Jordan River EcoWalk. Have them write a short report about the bird and how the Jordan River provides the resources it needs to survive.