

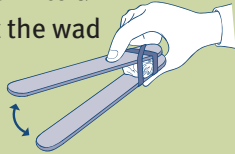
Eat Like a Bird

Activity 4

All animals need to eat to survive, and all animals have features (e.g., claws or a good sense of smell) that help them collect the food they need. Eat Like a Bird lets kids explore how the shape of a bird's beak influences the bird's food-gathering ability. Kids will use their "beaks" to play a game in which they collect "food." It's feeding time!

Prepare Ahead

- Make tongs: crumple a strip of paper into a wad about the width of a finger. Put the wad between two tongue depressors. Secure with a rubber band. Adjust so the tongs open when not in use.



- Use masking tape to make a circle 6–8 feet in diameter and a starting line 8–10 feet away.
- Make three group charts so you can record the results of each round. The example below is set up for two teams of kids. Adjust your chart according to how many teams you have.

Round 1

Food	Group 1 Beak Tool=	Group 2 Beak Tool=
Marbles		
Lima beans		
Kidney beans		
Pennies		
Paperclips		
Paper balls		
Rubber bands		
Total amount of food		

Lead the Activity

1 Introduce Ruff's challenge. (5 minutes)

Explain that in today's challenge, kids will gather "food" using tools that are like birds' beaks. Show them the five different "beaks," (including the tongs you made). Ask:

- How might this beak help a bird gather food? (*Spoons and forks scoop. Toothpicks and forks poke and stab. Tongs and clothespins grab.*)
- Which kinds of foods do you think would be the easiest to pick up with each of these beaks? Which will be the hardest to pick up? (*Record the predictions on a board or chart.*)

2 Test predictions by playing Round 1.

(10 minutes) Tell kids this game is a relay race. The goal is for each team to collect as much food as possible—the number of collected items is what counts, not the size or type. Review the rules (see Game Rules on next page). Divide the group into teams of three or four. Give each team a cup, pencils, activity sheets, and one kind of tool. Then sprinkle the food in the circle. Say, "Go," and give teams five minutes to collect as much food as possible.

Materials

- Activity sheet for each kid
- Group data sheets (see Prepare Ahead)
- Pencils (one per kid)
- Cups (one per group)
- 10 tongue depressors
- Masking tape
- 3–5 of each of the following "beaks": round toothpicks (flat toothpicks break too easily), spoons, forks, and spring-action wooden clothespins
- "Food" items (at least three of each item per kid): marbles, dried lima beans, dried kidney beans, pennies, paperclips, paper wadded into grape-sized balls, and thin rubber bands

National Science Education Standards

Grades K–4

Life Science:
Characteristics of organisms

Grades 5–8

Life Science:
Diversity and adaptations of organisms

3 DISCUSS what happened. (10 minutes) After five minutes, have each team fill in the data table on the activity sheet. Record each team's data on the group data chart (see Prepare Ahead). Ask:

- Which birds can survive on a wide variety of foods and which can survive on only a few kinds? (*Beaks with similar totals for many foods represent birds that can survive on a wide variety of foods. Beaks with high totals for only one or two kinds of food represent birds that can survive on only a few foods.*)
- If a certain food became unavailable, how might that affect the different birds? (*Birds that depend on a food that becomes unavailable would go hungry. Birds that eat many different kinds of food could still feed.*)

4 PLAY Round 2. (10 minutes) Assign each team a new kind of beak. Inside the circle, redistribute the food collected in round 1 and return the empty cups to the teams. Repeat steps 2 and 3.

5 DISCUSS what happened. (10 minutes) Draw kids' attention to the data on the group chart.

- In our game, if you wanted to make life easy for birds with tong-like beaks, which foods would you put in the circle? (*Marbles*)
- Which birds couldn't live in a habitat with only marbles to eat? (*Ones with toothpick-like beaks*)
- Habitats usually offer many different kinds of food. When fully stocked, would the "habitat" inside our circle be suitable for a wide variety of beak shapes or for only a few? Why? (*A wide variety, since there are many kinds of food*)

6 PLAY Round 3. (10 minutes) Let kids apply what they learned. This time, let teams choose their beak. Encourage them to look at the group data to decide which beak is most effective at gathering food. Then repeat steps 2 and 3.

7 Award points. (5 minutes) Time to rack up some points. Gather as a group. Review the activity's key ideas by asking the following questions. Each one is worth 50 points. Whenever you hear an acceptable answer, award 50 points to the entire group.

- Name three different beak shapes and how birds use them to collect food. (*Pointy beaks spear food; spoon-shaped beaks scoop food; tong-like beaks grab food.*)
 - Name a beak we used today that belongs to a bird that eats only a few foods and one that belongs to a bird that eats many foods. (*Toothpicks and clothespins belong to birds that eat a few foods. Spoons, forks, and tongs represent birds that eat many foods.*)
 - Name three animals other than birds and a feature that helps each one gather its food.
 - Why is it unlikely that a bird that drinks nectar from flowers would suddenly start eating fish? (*It doesn't have the right beak shape to eat fish, so it would eventually go hungry.*)
- Doing science involves making predictions, testing them (which includes doing something, making observations, and drawing conclusions), and sharing your results. Give an example of how we did these steps today. (*Answers will vary.*)

game Rules

- In rounds 1 and 2, teams must use the beak assigned by the leader.
- Kids start behind the line. One member from each team runs into the circle, picks up one piece of food, carries it back to the team, and puts it into the cup. The next person in line takes the beak and repeats the process.
- No hands can touch the food, and only one piece of food should be picked up per turn.
- Kids who use their beaks inappropriately lose their turn.



Eat Like a Bird

Today's challenge is to collect "food" using different types of "beaks" and to find the food that's easiest to pick up. Do you like worms? Just kidding!



What to DO

1 DO Round 1 of the relay race. Make sure your team has a cup and one beak. When you hear "Go!," your team has five minutes to collect as many pieces of food as possible.

But first, the rules:

- Stand with your team behind the starting line. The person at the front of the line runs into the circle, picks up *one* piece of food using the beak, carries it back to the starting line, puts it into the cup, and hands the beak to the next person in line.
- Only the beak can touch the food—no hands allowed!
- Collect only one piece of food per turn.
- If you drop your food, use your beak to pick it up again.
- Remember, collecting more pieces is better. Don't worry about the size of the food you get.

2 Record Your data. After round 1 is over, record in the table below how much food your team collected.

3 Share results. Compare how much food each team collected.

4 DO Round 2. You'll be given a new kind of beak, but otherwise it's the same as round 1.

5 DO Round 3. This time, you choose the beak you'll use. Use the data on the group chart to help you figure out which beak will help you collect the most food.

chew On This

All dogs, cats, plants, bugs, and other creatures have features that improve their chances of surviving in particular habitats. For example, pelicans scoop fish from the ocean and woodpeckers find insects under tree bark. If a pelican were blown into a forest or a woodpecker blown out over the ocean, they would have to return to the habitat for which they are adapted or else risk starving.

Scorecard—How much did you collect?

Item	Round 1	Round 2	Round 3
	Beak used: # Collected	Beak used: # Collected	Beak used: # Collected
Marbles			
Lima beans			
Kidney beans			
Pennies			
Paperclips			
Paper balls			
Rubber bands			
TOTAL			

Dig Deeper

* Think about the features other animals have to help them find food and survive. Over the next week, watch any animal. Think: What helps them get the food they need? For example:

Squirrels: What foods do they eat? What body parts or behaviors help them get it?

Fish: Drop fish food into a tank. What helps the fish find and eat the food?

Ants: Closely follow an ant! How does it find food? Did you know that ants can carry 20 times their weight? Imagine if you could do the same!

* Do you like using tools in unusual ways? Race a friend to see who can pick up the most marbles using chopsticks. Get the Chop Sticks Pickup challenge from the ZOOM Web site at pbskids.org/zoom/activities.



Watch FETCH! on PBS KIDS GO! (check local listings) and visit the FETCH! Web site at pbskidsgo.org/fetch.

Great! So I'll just order some of the finest dried beans and office supplies and serve those for lunch! Got it. What a bunch of odd ducks!



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Fold

Fetch!

Eat Like a Bird

My neighbors, the Birds, are coming over for lunch in about an hour. Better call for takeout. Hello? Hi, Ruff Ruffman here. I'm having some birds over for lunch. Sooo, I'd like egg rolls, Moo Goo Gai Pan, and . . . What? What do you mean birds don't eat Chinese food? Oh boy. This isn't good. This lunch is going to be a disaster! Hey, maybe *you* can help me. I need some help planning the menu and, well, eating like a bird.

GOOO FETCH!

