

# Home Activity Workbook

# Adapt to Survive!



Name:			
Date: _			
Time:			

Weather: \_\_\_\_\_



## Adapt to Survive!

An adaptation is something special about an animal's body or behavior that helps it to survive in its habitat. For example, woodpeckers have strong, pointy beaks for drilling holes in tree trunks and looking for insects under the bark, hummingbirds migrate long distances, from northern Canada to Mexico, in search of food every winter. Hawks have sharp talons to help them catch their prey mid-flight.

### <u>Activity #1 (Beginner): Nature Observations</u>

Materials: Pencil

<u>Challenge:</u> Look out your window or take a walk in your neighborhood to observe bird adaptations in real life. Write or draw your observations.



What do you see?

What do you hear?



What do you smell?

Stand really still and silent for a few minutes. Do you see or hear any birds? You might see them hopping around on the ground, perched on a tree branch, soaring high above you, or flying past your window. What do these birds look like? What adaptations do you see that help these birds survive? Write or draw your observations.



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Activity #2 (Intermediate): Design a Bird

Materials: Recycled materials, tape, scissors, pencil

<u>Challenge:</u> Design a bird that could survive in New Mexico in the summer.

What is New Mexico like in the summer time? Write a list of the challenges that a bird might face in the heat of a New Mexico summer.

Now, write a list of body parts or behaviors that would help this bird survive in New Mexico.



Draw a picture of your bird design. What special adaptations will you give the bird to help it survive?

Now that you have drawn your design, build your bird out of materials you find around the house! Look for useful items in the recycling bin. Make sure they are clean and safe to use.



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### Activity #3 (Advanced): Bon Appetweet

Materials: Pencil, clock or watch, assorted "beak" and "bird food" materials (see below), bowl

<u>Challenge:</u> Explore how different bird beaks are adapted to eating certain types of food.

In this activity, you are going to practice being a bird. In each round, you will have a new type of "beak". Some possible "beaks" you could use include tweezers, a fork, tongs, a clothespin, a bag clip, a spoon, or anything else from around your home that reminds you of a bird beak! Choose 3 different types of beaks.

In each round, you will try to eat three different types of bird food. Some types of "bird food" that you could use include pennies, straws, craft beads, pieces of paper cut up into little strips or anything else from around your home that reminds you of bird food! Choose 3 different types of food, and try to choose foods that are all shaped differently from one another. In each round, there are three stages, each of which lasts 20 seconds long. For each stage, you will time yourself for 20 seconds, trying to "eat" as many pieces of one type of "food" in each stage. You have successfully "eaten" a piece of "food" once you move it into the bowl or another container representing your "nest".

Before you start the round, record what type of beak and what foods you are using on the following table. After each stage, record how many pieces of food you "ate" in those 20 seconds.

Ready... set... go!

				Total Number
Round	Stage	Beak	Food	Eaten
1	А			
	В			
	С			
2	А			
	В			
	С			
3	А			
	В			
	С			

Which "foods" were the easiest to "eat" with your different beaks? Which were most difficult?

If your preferred source of food disappeared, what are some things you could do to adapt to survive?

What did you learn?

What makes a bird a bird? Can you list 5 things that makes birds different from other animals?

1.	
2.	
3.	
4.	

5.

**Tell 3 people about what you learned**! Find someone that you live with or call a friend or family member and tell them what you have learned. Ask them if they can see any birds where they live. What adaptations do *they* observe? Write or draw them here.

Take a picture of the bird you built and send it to your teacher! Ask an adult to send it to Audubon educators at sally.maxwell@audubon.org. We would love to see your creations!

### Adapt to Survive!

#### Parent/Caregiver Background Information

An adaptation is something special about an animal's body or behavior that helps it survive in its habitat. Birds have many special adaptations including their feathers, feet, beaks, hollow bones, and their nest-building and egglaying behaviors. Depending on the bird's habitat (a forest, a shoreline, a desert, etc.), its feet, beak, body shape, nest shape, and eggs may look very different from those of other birds living in other habitats. They also may do very different things to find food and mates and to protect their young. For example, a duck has webbed feet to help it swim. An eagle has a sharp, hooked beak to help it tear apart meat. All birds have hollow bones, which make their bodies very light, allowing them to fly. In this activity, your child will be exploring different bird adaptations through observations, a design challenge, and a game.

#### Materials Required

- Assorted materials from your recycling bin
- Pencils, colored pencils, or markers
- Scissors
- Clock or timer
- Таре
- Assorted household items for Bon Appetweet Game

#### Digital Resources

- Audubon Adventures Website, <a href="http://www.audubonadventures.org/wild\_about\_birds\_kids.htm">http://www.audubonadventures.org/wild\_about\_birds\_kids.htm</a>
- Audubon for Kids Website, <a href="https://www.audubon.org/get-outside/activities/audubon-for-kids">https://www.audubon.org/get-outside/activities/audubon-for-kids</a>
- Cornell Lab of Ornithology K-12 Corner, <u>https://www.birds.cornell.edu/k12/science-nature-activities-for-cooped-up-kids/</u>
- eBird (see who has been spotted in your area recently!), <u>https://ebird.org/home</u>

#### Additional Resources

- Storybook: *Ruby's Birds* by Mya Thompson
- Storybook: What makes a bird a bird? by May Garelick

This activity is aligned to your child's school science standard! Through this activity they will...

- 3rd-5th Grade: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem (3-5-ETS1-2).
- 3rd Grade: Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all (3-LS4-3).
- 4th Grade: Construct an argument that plants and animals have internal and external structures that function to support growth, survival, behavior, and reproduction. (4-LS1-1)



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### Example of Activity #3 Bon Appetweet Table

				Total Number
Round	Stage	Beak	Food	Eaten
1	A (20s)		Pennies	4
	B <b>(20s)</b>	Tongs	Beans	9
	C (20s)		Straws	13
2	A (20s)		Pennies	8
	B (20s)	Bag Clíp	Beans	17
	C (20s)		Straws	25
3	A (20s)		Pennies	16
	B (20s)	Tweezers	Beans	3
	C (20s)		Straws	7