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.

Activity #1 (Beginner): Nature Observations

Materials: pencil

Challenge: Look out your window or take a walk in your neighborhood to observe bird adaptations in real life.

Look out the window or take a walk outside. 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, soaring high above you, or flying past your window. What do these birds look like? What adaptations do you see that helps these birds survive? Write or draw your observations.
Adapt to Survive!

Activity #2 (Intermediate): Design a Bird

Materials: recycled materials, tape, scissors, pencil

Challenge: 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.
Adapt to Survive!

Activity #3 (Advanced): Bon Appetweet

**Materials:** pencil, clock or watch, assorted “beak” and “bird food” materials (see below)

**Challenge:** 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 food that are all shaped very different from one another. In each round, there are three stages. Each stage lasts 20 seconds. You will time yourself for 20 seconds, trying to eat as many pieces of one type of food in each stage.

Before you start the round, record what type of beak and 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!
<table>
<thead>
<tr>
<th>Round</th>
<th>Stage</th>
<th>Beak</th>
<th>Food</th>
<th>Total Number Eaten</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What did you learn?

What makes a bird a bird? Can you list 5 things that makes birds special 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 designed 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 egg-laying behaviors. Depending on the birds habitat (a forest, a shoreline, a desert, etc.) it's feet, beak, body shape, nest shape, and eggs may look very different from one another. They also may do very different things to find food, 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 and a design challenge.

Materials:
- Assorted materials from your recycling bin
- Pencils, colored pencils, or markers
- Scissors
- Tape

Digital Resources
- Audubon Adventures Website, http://www.audubonadventures.org/wild_about_birds_kids.htm
- Audubon for Kids Website, https://www.audubon.org/get-outside/activities/audubon-for-kids
- Cornell Lab of Ornithology K-12 Corner, https://www.birds.cornell.edu/k12/science-nature-activities-for-cooped-up-kids/
- eBird (see who has been spotted in your area recently!), https://ebird.org/home

Additional Resources
- Storybook: Ruby’s Birds by Mya Thompson
- Storybook: What makes a bird a bird? by May Garelick

This activity is aligned to Next Generation Science Standards! Through this activity they will...

- K-2nd Grade: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem (K-2ETS1-2).
- Kindergarten: Use observations to describe patterns of what plants and animals need to survive (K-LS1-1). Use a model to represent the relationship between the needs of different plants and animals and the places they live (K-ESS3-1).
- 1st Grade: Read texts and media to determine patterns in behavior of parents and offspring that help offspring survive (1-LS1-2).
- 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)

This workbook is supported and funded by the New Mexico Department of Game and Fish’s Share With Wildlife Program.
### Example of Activity #3 Bon Appetweet Table

<table>
<thead>
<tr>
<th>Round</th>
<th>Stage</th>
<th>Beak</th>
<th>Food</th>
<th>Total Number Eaten</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A (20s)</td>
<td>Tongs</td>
<td>Pennies</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>B (20s)</td>
<td></td>
<td>Beans</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>C (20s)</td>
<td></td>
<td>Straws</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>A (20s)</td>
<td>Bag Clip</td>
<td>Pennies</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>B (20s)</td>
<td></td>
<td>Beans</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>C (20s)</td>
<td></td>
<td>Straws</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>A (20s)</td>
<td>Tweezers</td>
<td>Pennies</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>B (20s)</td>
<td></td>
<td>Beans</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>C (20s)</td>
<td></td>
<td>Straws</td>
<td>7</td>
</tr>
</tbody>
</table>