



The Columbus Zoo and Aquarium endeavors to foster a lifelong connection with nature in children and adults by creating a meaningful link between people and wildlife. These activities are designed to be done either at home or at school. Before diving into the materials, here are some tips to help you plan:

These activities are structured around the 5E Lesson Plan model, commonly used in science education:

ENGAGE - Sparking interest in a topic

EXPLORE - Student-led investigation of concepts

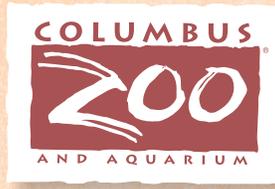
EXPLAIN - Clarification of concepts

EXTEND - Student-led application of concepts

EVALUATE - Opportunity to demonstrate understanding of concepts

This activity packet will guide students as they explore wildlife and wild places. We encourage parents and teachers to utilize all five activities chronologically to provide students a complete learning experience. These activities can be done in a day, or over a longer time span. It is ideal because the educator can tailor the timing around the needs of the learners.

Each section has a brief activity description and a list of materials needed. The instructions are written for the learner; however, we encourage adults to work closely with their students. (Be sure to supervise students when doing any outdoor activities.) Most importantly, we hope you have a fun and engaging experience!



ADAPTATIONS

5 STEPS TO A MEANINGFUL ZOO PROGRAM	DESCRIPTION OF ACTIVITY	ESTIMATED TIME	MATERIALS NEEDED
<p>ENGAGE</p> <p>Introduction to animal adaptations.</p>	<p>Read <i>"How and Why Animals Do Adapt?"</i> by Bobbie Kalman.</p> <p>Stop after every page and talk with your adult about what you learned.</p> <p>Complete Animal Body Coverings page.</p>	<p>15-30 minutes</p>	<p>Scissors, glue</p> <p><i>"How and Why Animals Do Adapt?"</i> by Bobbie Kalman</p> <p>Copies of Animal Body Coverings activity sheet</p>
<p>EXPLORE</p> <p>Explore how animals "rest" for the winter and why.</p>	<p>Read <i>"When Winter Comes"</i> by Pearly Neuman. What is hibernation? Why do animals prefer specific habitats?</p>	<p>15-25 minutes</p>	<p><i>"When Winter Comes"</i></p>
<p>EXPLAIN</p> <p>Explain how living things' babies often look like the adult.</p>	<p>How do young animals resemble their parents? Read <i>Born in the Wild</i> by Lita Judge.</p> <p>Do the Memory Match activity to see if you can match an animal to its parent.</p>	<p>20-30 minutes</p>	<p><i>"Born in the Wild"</i></p> <p>Copies of Memory Match</p>
<p>EXTEND</p> <p>Look for adaptations in nature.</p>	<p>Go on a nature walk at home or the Zoo to identify adaptations animals have and why. Look for and identify any adaptations/body structures you notice with your teacher or adult group leader.</p> <p>On a piece of paper, draw two columns. Label the first as "Adaptation" and the second as "Why." Write down what adaptations you notice and explain why you think the animal needs that adaptation.</p>	<p>20-30 minutes</p>	<p>Chart paper</p> <p>Crayons, pencils/pens, or markers</p>
<p>EVALUATE</p> <p>Think about an adaptation and identify the purpose of that adaptation.</p>	<p>Animals have so many amazing adaptations, or special things about their body that help them to survive. When scientists study these animals in the wild, they sometimes create a scientific sketch. These sketches help them communicate information to their fellow scientists.</p> <p>Watch this gibbon video and see if you can create a scientific sketch to share the gibbons' adaptations. Be sure to label all the adaptations you noticed.</p>	<p>20-30 minutes</p>	

MEMORY MATCH

Many animals look like their parents. Can you match the babies to the right adult? Cut out the animals below. Then turn them face down and play a memory game with a friend. Take turns matching the baby and adult animals. **How many can you match?**



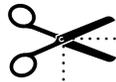
ANIMAL BODY COVERINGS CHART

All animals have something that covers their body. It can be fur, feathers, scales, shells or even smooth skin! Cut out the pictures on the next page and then paste them in the correct box below.

<p>FUR</p>	<p>EXAMPLE</p>  <p>KOALA</p>				
<p>FEATHERS</p>					
<p>SCALES</p>					
<p>SHELL</p>					
<p>SMOOTH SKIN</p>					

ANIMAL BODY COVERINGS

Cut out the pictures on this page and then paste them in the correct box on the Animal Body Coverings Chart.



RABBIT



BEAR



FROG



LIZARD



CARDINAL



TOUCAN



FISH



SNAKE



TURTLE



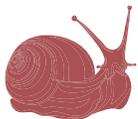
EAGLE



CRAB



STINGRAY



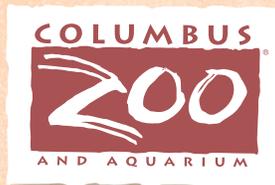
SNAIL



OCTOPUS



TIGER



PICTURE BOOKS



***WHILE GRADE LEVELS ARE LISTED, ALL BOOKS ARE APPROPRIATE FOR ALL AGES.**

PICTURE BOOK	AUTHOR	GRADES
<i>What Do You Do With a Tail Like This?</i>	Steve Jenkins	K-2
<i>One Tiny Turtle</i>	Nicola Davies	K-2
<i>The Snail's Spell</i>	Joanne Ryder and Lynne Cherry	K-2
<i>Animal Adaptations</i>	Julie Lundgren	3-5
<i>Animals Hibernating: How Animals Survive Extreme Conditions</i>	Pamela Hickman	3-5
<i>Eye Spy: Wild Ways Animals See the World</i>	Guillaume Duprat	K-2
<i>When Winter Comes</i>	Pearly Neuman and Richard Roe	K-2
<i>Claws, Coats and Camouflage</i>	Susan E. Goodman	3-5
<i>Animals in Camouflage</i>	Phyllis Limbacher Tildes	K-2
<i>How and Why Do Animals Adapt?</i>	Bobbie Kalman	3-5
<i>What Kinds of Coverings Do Animals Have?</i>	Bobbie Kalman	3-5
<i>Over and Under the Snow</i>	Kate Messner	3-5
<i>Born in the Wild</i>	Lita Judge	K-2