



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!

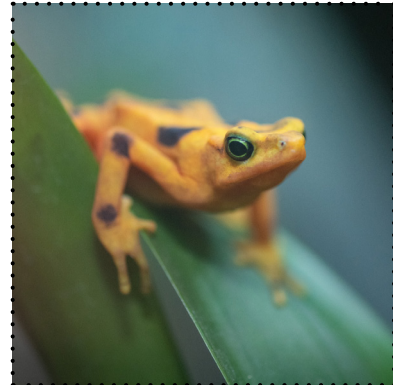


ADAPTATIONS

5 STEPS TO A MEANINGFUL ZOO PROGRAM	DESCRIPTION OF ACTIVITY	ESTIMATED TIME	MATERIALS NEEDED
<p>ENGAGE</p> <p>Introduction to Body Structures and Adaptations.</p>	<p>Read <i>"Claws, Coats and Camouflage"</i> by Susan E. Goodman.</p> <p>Stop after every page and talk with your adult about what you learned.</p>	<p>15-30 minutes</p>	<p><i>"Claws, Coats and Camouflage"</i> by Susan E. Goodman</p>
<p>EXPLORE</p> <p>Explore different animal adaptation/body structures.</p>	<p>Do the Memory Match and the Animal Body Coverings Chart.</p>	<p>20-30 minutes</p>	<p>Copies of Memory Match and Animal Body Coverings Chart</p> <p>Scissors</p>
<p>EXPLAIN</p> <p>Explain that animals have adaptations for their safety and well being.</p>	<p>Read <i>"Over and Under the Snow"</i> by Kate Messner.</p> <p>Discuss with an adult the differences in animal tracks and how that helps the animal. Can you draw some of the tracks you saw?</p>	<p>15-30 minutes</p>	<p><i>"Over and Under the Snow"</i></p> <p>Paper</p> <p>Crayons, pencils/pens, or markers</p>
<p>EXTEND</p> <p>Go on a nature walk at home/school or the Zoo to identify adaptations animals have and why.</p>	<p>Go outside with an adult. Look for and identify any adaptations or body structures you notice with your teacher or adult.</p> <p>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>Apply concepts to identify different adaptations.</p>	<p>Watch gibbons video</p> <p>Write down at least 4 body structures/adaptations you learned from the video.</p>	<p>20-30 minutes</p>	<p>Video</p> <p>Paper</p> <p>Crayons, pencils/pens, or markers</p>

MEMORY MATCH

All animals have adaptations that help them survive in their environment. Cut out the animals and descriptions below. Then turn them face down and play a memory game with a friend. Take turns matching the adaptation with the animal. Are there some adaptations that match with different animals? **How many can you match?**



STRONG
LEGS

LONG
NECK

LARGE
EARS

BLACK
WHITE
STRIPES

POISONOUS
SKIN

SHARP
TEETH

ANIMAL BODY COVERINGS CHART

Animals have different body coverings that help them survive in their environment. These coverings include fur/hair, shells, scales, skin and feathers. **Can you match the animal to its covering?**



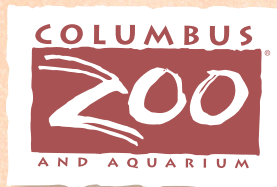
- FUR

- SHELL

- SCALES

- SKIN

- FEATHERS



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