Homes and Habitats Grades 3-5

PROGRAM OVERVIEW

Welcome to Cosley Zoo! This program focuses on habitats and adaptations as we discuss the different aspects of a habitat and the qualities animals have that help them to survive. We will use biofacts such as skulls, feathers, and pelts, as well as live animals, to demonstrate different adaptations.

Program Objectives:

- to review the three components of habitat (food, water, and shelter)
- to identify adaptations various animals have to meet their habitat requirements

This class corresponds with the following Late Elementary Illinois learning standards: 4.A.2b, 4.B.2b, 12.B.2a, 12.B.2b, 24.A.2b

PRE-VISIT ACTIVITIES

Here are some suggested activities for your class to complete before your visit to Cosley Zoo. Many of these activities correspond with Illinois learning standards, which are listed after the appropriate activities.

- 1. Ask students to complete the "Vocabulary Match-Up" worksheet. Dictionaries may be used to research unfamiliar words. (1.A.2b)
- 2. Distribute the "What's My Habitat?" worksheet. Students will research the habitats of several Illinois animals and record the results in a table. (1.C.2f, 5.A.2b, 11.A.2c)
- 3. Ask students to complete the "Zookeeper Math" worksheet. (6.B.2, 6.C.2a, 7.A.2a, 7.C.2b, 9.A.2b, 10.A.2a, 10.A.2b, 10.B.2b, 10.B.2c)

POST-VISIT ACTIVITIES

The following post-visit activities will help you to extend your visit to Cosley Zoo. Corresponding learning standards are listed after each activity.

- 1. Distribute copies of the "Guess the Animal" worksheet to the class and ask your students to fill them out. Collect the sheets and read the clues aloud to the group. See how quickly they can guess the animals. (3.C.2a, 4.A.2a)
- 2. Play "Adaptation Bingo"! Your students can cut out the animal pictures and glue them to their bingo boards in random order, then mark off each animal as you read its adaptation clue. (12.B.1a, 12.B.2b)
- 3. Pass out a small toy animal to each member of your class. Ask them to design a zoo exhibit for their animal, keeping in mind the animal's habitat requirements and special adaptations. Then have the students demonstrate their designs by making shoebox dioramas (11.B.2a, 11.B.2b, 11.B.2c, 26.B.2d Visual)

If you have questions or comments about your visit to Cosley Zoo, please share them with us. Call 630/665-5534 or send them to:

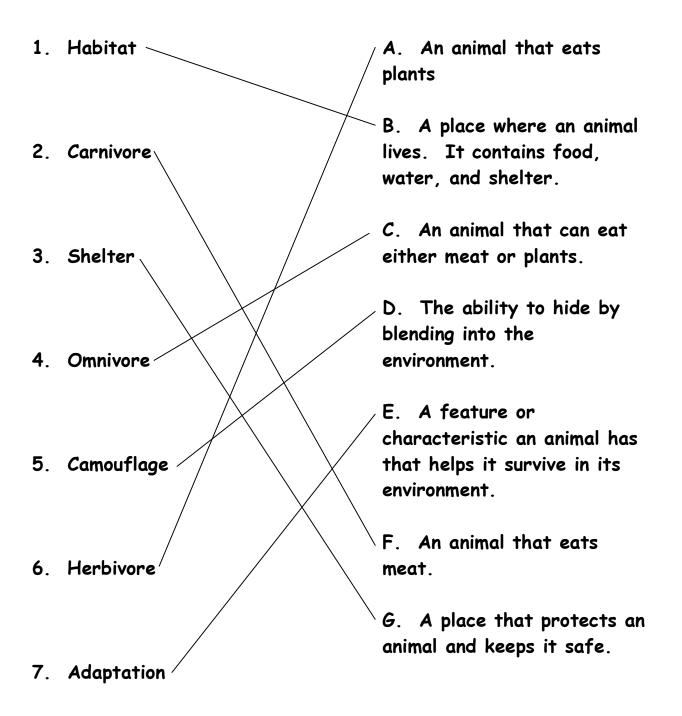
Education Supervisor Cosley Zoo 1356 Gary Ave. Wheaton, IL 60187

VOCABULARY MATCH-UP

Match the word with its definition.

1.	Habitat	A. An animal that eats plants
2.	Carnivore	B. A place where an animal lives. It contains food, water, and shelter.
3.	Shelter	C. An animal that can eat either meat or plants.
4.	Omnivore	D. The ability to hide by blending into the environment.
5.	Camouflage	E. A feature or characteristic an animal has that helps it survive in its environment.
6.	Herbivore	F. An animal that eats meat.
7.	Adaptation	G. A place that protects an animal and keeps it safe.

VOCABULARY MATCH-UP ANSWER KEY



WHAT'S MY HABITAT?

Learn more about the habitats of these four Illinois animals using books or the internet, then fill in the table below.

	Great Horned Owl	Red Fox	American Bullfrog	Cottontail Rabbit
What does it eat?				
What type of shelter does it need?				
Does it have any predators?				
What special features does it have (sharp teeth, a shell, thick fur, etc.)?				

WHAT'S MY HABITAT? ANSWER KEY

What does it eat?	Great Horned Owl Rabbits, mice, squirrels, skunks, snakes, birds, domestic cats	Red Fox Rabbits, mice, and birds. May also eat some plant material such as berries and fruits.	American Bullfrog Worms, crustaceans, insects, other frogs and their eggs. Tadpoles eat	Cottontail Rabbit A variety of plant material including grasses, fruits, vegetables, and twigs
What type of shelter does it need?	They prefer nest sites in trees or cliffs which are close to the edge of a forest where they can hunt.	The Red Fox uses the abandoned den of another animal, such as a woodchuck.	aquatic plants. Areas with still shallow water, such as lakes and ponds.	Brush piles, thickets, or tall grasses. Also takes shelter in burrows dug into the ground.
Does it have any predators?	No	Primarily humans. Also wolves, coyotes, bobcats and cougars.	Many animals prey on the bullfrog. Examples include Snapping Turtles, herons, skunks, and raccoons.	Many, including hawks, owls, foxes, and coyotes
What special features does it have (sharp teeth, a shell, thick fur, etc.)?	 wing feathers are fringed at tips for silent flight cylinder-shaped eyes provide excellent night vision extra vertebrae in its neck to turn head farther around talons hooked beak 	 excellent sense of eyesight, hearing, and smell sharp teeth for tearing meat thick fur for warmth, with a bushy tail that can be wrapped around the fox's nose coloration helps the fox to camouflage 	 eggs and tadpoles have an unpleasant taste to prevent other animals from eating them strong legs for jumping camouflage coloration slimy skin to keep its body moist 	 large ears can swivel to pick up sounds strong hind legs feet have claws for traction and fur on the bottom for warmth eyes on the sides of their heads to see danger approaching from any direction white underside of tail serves as a warning to other rabbits

ZOOKEEPER MATH

- 1. Create an exhibit for two raccoons on the grid below. Your exhibit should be 500 square feet in area. Each box is equal to 5 square feet. Be sure to include:
 - 125 square feet of water
 - Shelter for both raccoons
 - Something to climb on (but make sure they don't get out!)
 - Anything else you think the raccoons might need

ZOOKEEPER MATH

2. Each of the two raccoons eats 1 pound of food per day. How many bags of food will you need to order to feed the raccoons for one year (365 days)? Each bag of food weighs 50 pounds.

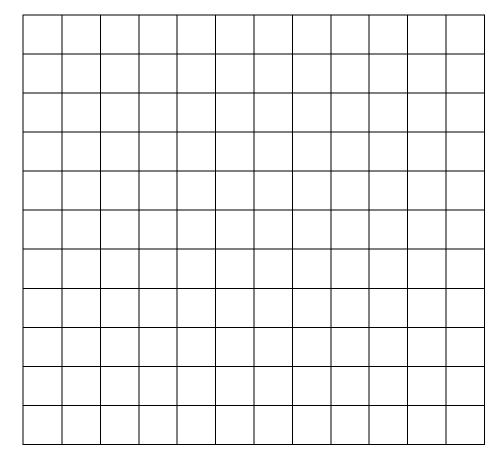
3. Your supervisor has asked for some information on the weight of the raccoons. Use the chart below to determine the mean, range and mode of the weights for each raccoon.

Date	Weight of Raccoon #1	Weight of Raccoon #2
January 1	25 lbs.	28 lbs.
February 19	24 lbs.	31 lbs.
April 2	26 lbs.	29 lbs.
May 14	27 lbs.	33 lbs.
June 25	24 lbs.	30 lbs.
August 6	27 lbs.	27 lbs.
September 17	24 lbs.	31 lbs.
October 29	23 lbs.	31 lbs.

Raccoon #1	Raccoon #2		
Mean weight=	Mean		
weight=			
Mode=	Mode =		
Range=	Range=		

ZOOKEEPER MATH

4. Use the numbers from question 3 to create a line graph showing the raccoons' weights.



Weight (lbs.)

Date

GUESS THE ANIMAL

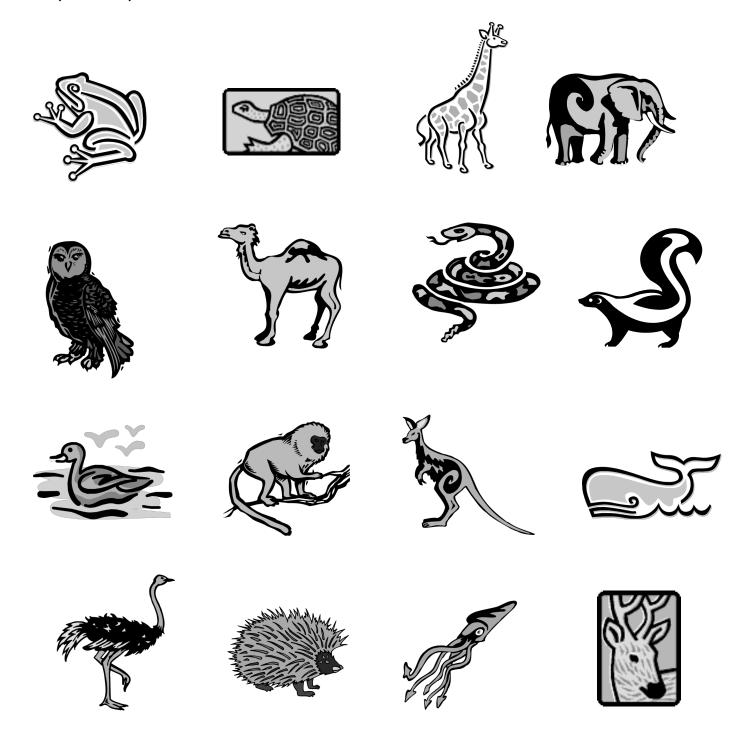
You are going to try to get your classmates to guess the secret animal you have chosen by writing clues about it. Think of an animal, then write 5 clues. The clues should be about the animal's adaptations. (Examples: My animal has a long neck OR My animal has sharp teeth OR My animal has a thick, furry coat.)

Name:	
My animal is a:	
<u>Clues:</u> 1.	
2.	
3.	
4.	
5.	

ADAPTATION BINGO

ADAPTATION BINGO

Cut out the following animals and place them on your bingo card in any order you wish.



ADAPTATION BINGO CLUES

My slimy skin doesn't taste good, so predators don't want to eat me. (FROG)

My antlers help me defend my territory. (DEER)

I never have to look for shelter, since I always carry mine with me. (TURTLE)

My feet are shaped like flippers to help me move better in the water. (DUCK)

My neck helps me reach high in the trees for my food. (GIRAFFE)

My tail helps me to keep my balance as I swing through the trees. (MONKEY)

I can swivel my head almost all the way around to look for food. (OWL)

My hump holds fat to keep me going if there's not much food around. (CAMEL)

My long nose helps me eat, carry things, and take a bath. (ELEPHANT)

My pouch helps to keep my baby safe by carrying it with me. (KANGAROO)

The rattling noise I make keeps my enemies away. (SNAKE)

ADAPTATION BINGO CLUES

I don't fly, but my long legs help me to run really fast if I need to. (OSTRICH)

My layer of blubber helps me stay warm when the water's cold. (WHALE)

Most predators don't come near me after I let out my awful smell. (SKUNK)

My pointy spines keep me safe from harm. (PORCUPINE)

If I'm being chased, I shoot out a stream of ink to give myself a chance to get away. (SQUID)