

Teaching Activity Guide

Animal Helpers

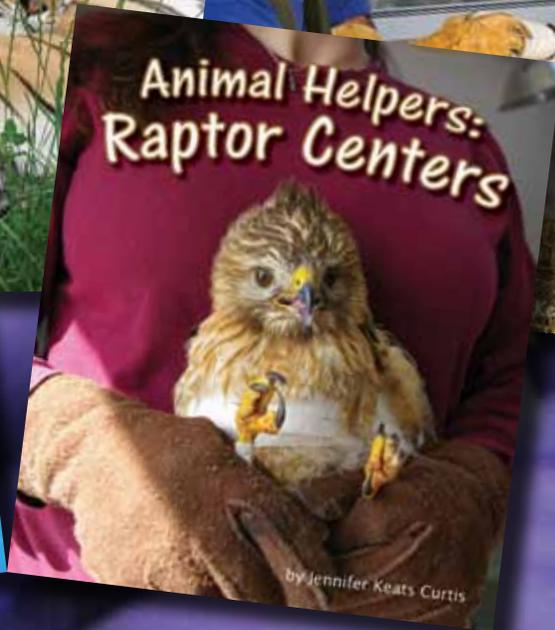
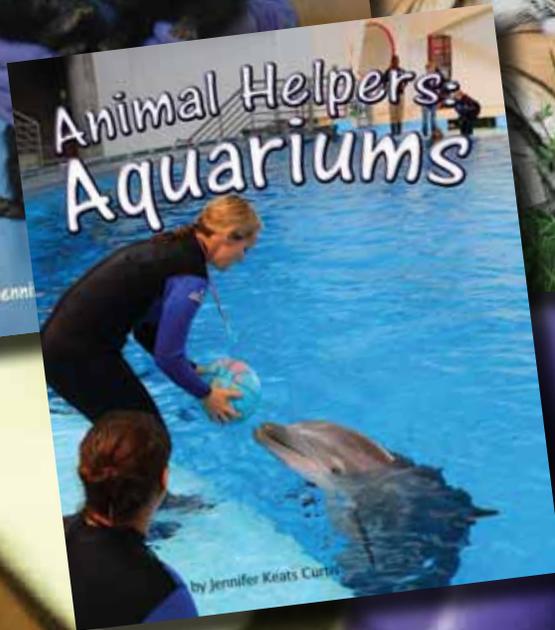
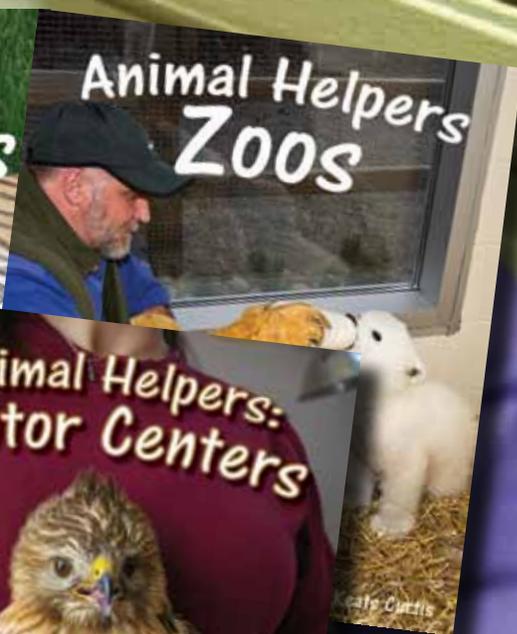
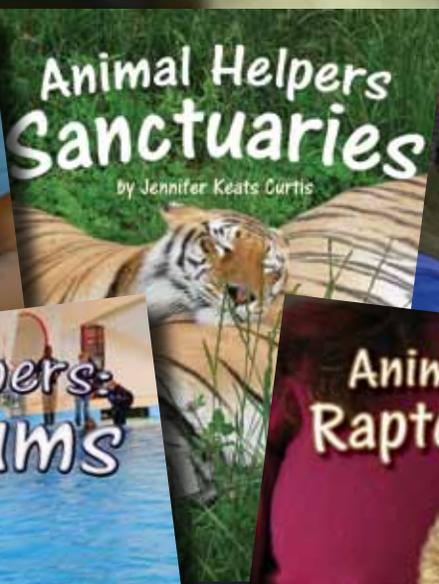
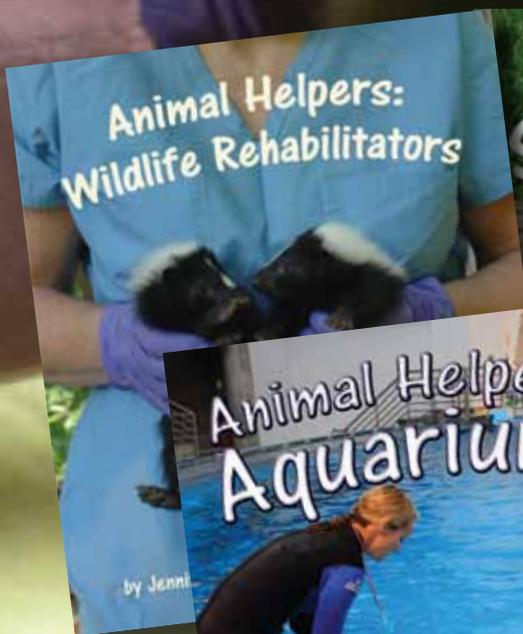
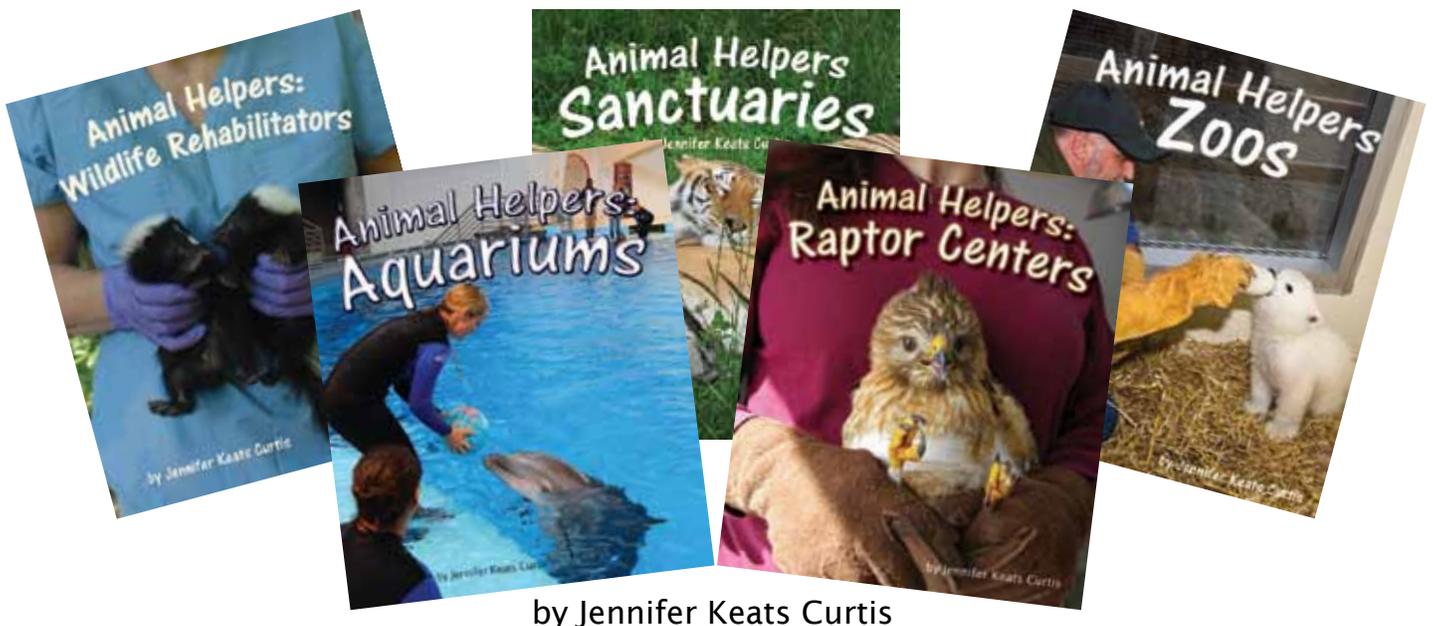


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by Jennifer Keats Curtis

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How to Use This Activity Guide (General)

There are a wide variety of activities that teach or supplement all curricular areas. The activities are easily adapted up or down depending on the age and abilities of the children involved. And, it is easy to pick and choose what is appropriate for your setting and the time involved. Most activities can be done with an individual child or a group of children.

For teachers in the classroom: We understand that time is at a premium and that, especially in the early grades, much time is spent teaching language arts. All Sylvan Dell titles are specifically selected and developed to get children excited about learning other subjects (science, geography, social studies, math, etc.) while reading (or being read to). These activities are designed to be as comprehensive and cross-curricular as possible. If you are teaching sentence structure in writing, why not use sentences that teach science or social studies? We also know and understand that you must account for all activities done in the classroom. While each title is aligned to all of the state standards (both the text and the For Creative Minds), it would be near impossible to align all of these activities to each state's standards at each grade level. However, we do include some of the general wording of the CORE language arts and math standards, as well as some of the very general science or social studies standards. You'll find them listed as "objectives" in italics. You should be able to match these objectives with your state standards fairly easily.

For homeschooling parents and teachers in private schools: Use as above. Aren't you glad you don't have to worry about state standards?

For parents/caregivers: Two of the most important gifts you can give your child are the love of reading and the desire to learn. Those passions are instilled in your child long before he or she steps into a classroom. Many adults enjoy reading historical fiction novels . . . fun to read but also to learn (or remember) about historical events. Not only does Sylvan Dell publish stories that are fun to read and that can be used as bedtime books or quiet "lap" reading books, but each story has non-fiction facts woven through the story or has some underlying educational component to sneak in "learning." Use the "For Creative Minds" section in the book itself and these activities to expand on your child's interest or curiosity in the subject. They are designed to introduce a subject so you don't need to be an expert (but you will probably look like one to your child!). Pick and choose the activities to help make learning fun!

For librarians and bookstore employees; after-school program leaders; and zoo, aquarium, nature center, park & museum educators: Whether reading a book for story time or using the book to supplement an educational program, feel free to use the activities in your programs. We have done the "hard part" for you.

What Do Children Already Know?

Young children are naturally inquisitive and are sponges for information. The whole purpose of this activity is to help children verify the information they know (or think they know) and to get them thinking “beyond the box” about a particular subject.

Before reading the book, ask the children what they know about the subject. A list of suggested questions is below. The children should write down their “answers” (or adults for them if the children are not yet writing) on the chart found in Appendix A, index cards, or post-it notes.

Their answers should be placed on a “before reading” panel. If doing this as a group, you could use a bulletin board or even a blackboard. If doing this with individual children, you can use a plain manila folder with the front cover the “before reading” panel. Either way, you will need two more panels or sections—one called “correct answer” and the other “look for correct answer.”

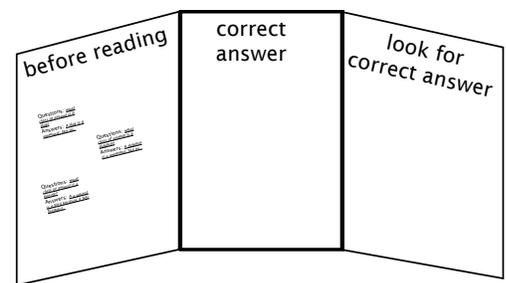
Do the children have any more questions about the subject? If so, write them down to see if they are answered in the book.

After reading the book, go back to the questions and answers and determine whether the children’s answers were correct or not.

If the answer was correct, move that card to the “correct answer” panel. If the answer was incorrect, go back to the book to find the correct information.

If the child/children have more questions that were not answered, they should look them up.

When an answer has been found and corrected, the card can be moved to the “correct answer” panel.



Wildlife Rehabilitators: Pre-Reading Questions

Looking at the cover of the book and reading the title, what do you think this book is about?

What is someone called who helps sick, hurt, or orphaned wild animals?

What are some differences between wildlife rehabilitators and veterinarians?

How are wildlife rehabilitators and veterinarians alike?

What are some things that rehabilitators might do to help wild animals?

What kind of food would rehabilitators feed orphaned animal babies?

How would rehabilitators feed the orphans?

Do wild animals ever need an operation or medicine?

Can wild animals ever break a leg or a damage wing?

If so, how would rehabilitators help those animals?

Comprehension Questions & Writing Prompts

Objective Core Language Arts, Speaking and Listening: Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

Retell stories, including key details, and demonstrate understanding of their message or lesson.

Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

Why should anyone help wild animals?

What are some things a wildlife rehabilitator might do to help wild animals?

How are rehabilitators like doctors, nurses, teachers, fireman or EMTs?

What are some “homes” rehabilitators provide to the wild animals?

What do rehabilitators try to do with the animals once they are old enough to survive on their own or healthy again?

What are some ways you know an animal is an orphan and not just left alone for a little while?

Why would an animal mother leave her “baby” alone?

What are some ways that you would know if an animal is hurt or sick?

Why do you think the rehabilitators wear gloves when holding the animals?

Do you think the rehabilitators treat the animals like pets? Why or why not?

Where do some animals go that can't go back to nature?

Wildlife Rehabilitators: Art Scavenger Hunt

Objective Core Language Arts Integration of Knowledge and Ideas: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

Compare and contrast some of the different animal body parts.

How are the bird feet alike and how are they different?

How are bird beaks alike and how are they different?

What do the ears look like?

What do the animal “hands” look like? Do you think they could hold onto something the way we do?

By looking at the pictures, can you tell if the animals have fur or feathers?

By comparing the animals to other things in the photos, can you tell how big or little the animals are?

Cross-Curricular Vocabulary Activities

Objective Core Language Arts:

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade-level reading and content.

Identify new meanings for familiar words and apply them accurately (e.g., duck is a bird & the verb to duck). Use words & phrases acquired through conversations, reading/being read to, and responding to texts.

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade-level topic or subject area.

Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.

Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

Use frequently occurring adjectives.

Vocabulary Game: This activity is a very general idea and is designed to get children thinking of vocabulary words that will then be used as the beginning vocabulary list for a science lesson.

Select an illustration from the book and give the children a specific length of time (five minutes?) to write down all the words they can think of about the particular subject. It is helpful to project an illustration on a whiteboard. Use eBook or book preview found at www.SylvanDellPublishing.com.

The children's word list should include anything and everything that comes to mind, including nouns, verbs, and adjectives. At the end of the time, have each child take turns reading a word from his/her list. If anyone else has the word, the reader does nothing. However, if the reader is the only one with the word, he/she should circle it. While reading the list, one person should write the word on a flashcard or large index card and post it on a bulletin board or wall.

At the end, the child with the most words circled "wins." And you have a start to your science vocabulary list. Note: if a child uses an incorrect word, this is a good time to explain the proper word or the proper usage.

Glossary/Vocabulary Words: Word cards may be used (see Appendix) or have children write on index cards, a poster board, or on a chalkboard for a "word wall." If writing on poster board or chalkboard, you might want to sort words into nouns, verbs, etc. right away to save a step later if using for Silly Sentences (on the next page). Leaving the words posted (even on a refrigerator at home) allows the children to see and think about them frequently. The glossary has some high-level words. Feel free to use only those words as fit your situation.

Using the Words: The following activities may be done all at once or over a period of several days.

- Sort vocabulary words into nouns, verbs, adjectives, etc. and write what they are on the backs of the cards. When the cards are turned over, all you will see is "noun," etc. (these can then be used for the "silly sentences" on the next page).
- After the cards have been sorted, go over the categories to ensure that all cards have been placed correctly. (Mistakes are a great opportunity to teach!)
- Choose two words from each category and write a sentence for each word.
- Write a story that uses at least ten vocabulary words from the word sort.
- Have children create sentences using their vocabulary words. Each sentence could be written on a separate slip of paper. Have children (individually or in small groups) sort and put sentences into informative paragraphs or a story. Edit and re-write paragraphs into one informative paper or a story.

Silly Sentence Structure Activity: This "game" develops both an understanding of sentence structure and the science subject. Use words from the "word wall" to fill in the blanks. After completing silly sentences for fun, have children try to fill in the proper words by looking for the correct information in the book.

Wildlife Rehabilitators: Word Bank

See Glossary for words in Spanish and the definition in English.

Adjective	Noun			Verb
alone	baby (ies)	fawn	osprey	bleed
baby	bandage	feathers	parent	cast
broken	biology	firefighters	pet	chatter
deep	bird	fledgling	predator	drink
feathered	bobcat	food	pup	fall
healthy	bone	fur	rabbit	feed
missing	burrow	habitat	raccoon	hatch
orphaned	cast	hurt	reptile	hide
sick	catbird	instinct	sanctuary	lay
split	dawn	mammal	shell	mend
tangled	disease	medicine	shelter	nestle
wild	doe	mother	veterinarian	raise
young	dusk	mourning dove	wildlife	rescue
	egg	nest	wildlife rehabilitator	survive
	EMT	nestling	young	
	eyedropper	opossum		

Wildlife Rehabilitators: Sequence Sentence Strips

Objective Core Language Arts:

Use temporal words and phrases to signal event order.

Cut into sentence strips, laminate if desired, and place in a “center.” Have children put the events in order that make sense. Children may work alone or in small groups. Cards are in order but should be mixed up when cut apart.



The baby opossums were found in the mother’s pouch after she was hit by a car and killed. They were wrapped in a blanket and taken to a wildlife rehabilitator.



The wildlife rehabilitator fed milk to the babies and kept them warm and safe.



Then the babies began to grow.



When the babies had grown enough, they started to eat solid food, like these strawberries.



After eating their fruits and vegetables, the opossums would curl up together and take a nap. When they were big enough to take care of themselves, they were released into the wild.

Wildlife Rehabilitators: Word Search

Find the hidden words. Even non-reading children can match letters to letters to find the words! Easy—words go up to down or left to right (no diagonals). For older children, identify the coordinates of the first letter in each word (number, letter).

	A	B	C	D	E	F	G	H	I	J
1	B	E	R	I	N	J	U	R	E	D
2	Q	A	S	Z	H	O	A	T	W	O
3	B	F	S	B	U	G	B	H	I	X
4	L	E	Q	I	R	U	V	O	L	C
5	Y	H	U	R	T	F	E	E	D	E
6	I	N	I	D	A	P	C	A	L	S
7	M	O	R	P	H	A	N	U	I	D
8	S	D	R	E	S	C	U	E	F	E
9	O	M	E	D	I	C	I	N	E	J
10	K	U	L	A	T	E	W	I	N	T

BIRD
FEED
HURT
INJURED
MEDICINE
ORPHAN
RESCUE
SQUIRREL
WILDLIFE

Sanctuaries: Pre-Reading Questions

What is an animal sanctuary?

Why might an animal need to live in a sanctuary?

What kinds of animals do you think live in sanctuaries?

How do you think takes care of animals in the sanctuaries?

What happens when animals in sanctuaries get sick?

Sanctuaries: Writing Prompts

Objective Core Language Arts, Speaking and Listening: Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

Retell stories, including key details, and demonstrate understanding of their message or lesson.

Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

What do you think life is like for an animal in a sanctuary? Pretend you are one of the animals in this book and write about what your day is like.

Taking care of animals in sanctuaries is a lot of work! Ask your parent, teacher, or another adult to help you find an animal sanctuary in your area. Write a “thank you” letter to the workers and volunteers who take care of the animals.

What kinds of things do you like to do for fun? Do you think you would enjoy the same activities if you were one of the animals in this book or would you want to do something different?

Sanctuaries: Word Bank

See Glossary for words in Spanish and the definition in English.

Adjective	Noun	Verb
back	animals	bat
big	bear	check
cuddly	binturong	drool
cute	bobcat	enjoy
dangerous	claws	feed
exotic	dentist	keep
expensive	humans	leads
former	jaguar	learn
important	kitten	live
large	linx	play
messy	medicine	pounce
new	mice	recover
old	pair	release
raw	prey	rescue
safe	rabbits	see
sharp	surgery	show
sick	teeth	stalk
small	tiger	train
smart	veterinarian	tranquilize
starving	wild	
tasty		
vanilla		
wild		

Sanctuaries: Word Families & Rhyming Words

Language Arts, Reading Standards: Foundational Skills, Recognize and produce rhyming words.
Word families are groups of words that have some of the same combinations of letters in them that make them sound alike...or rhyme. For example ad, add, bad, brad (Brad), cad, Chad, clad, dad, fad, gad, glad, grad, had, lad, mad, pad, plaid (silent 'i'), sad, shad, and tad all have an "ad" letter combination and rhyme.

- Find and write down rhyming words in the poem.
- Are they in the same word family?
- If so, circle the combination of letters that are the same.
- Can you think of more words in the word family?

Rhyming words are:

Raw

and

Paw

They are / are not from the same word family.

Other words that rhyme are:

Rhyming words are:

Prey

and

Play

They are / are not from the same word family.

Other words that rhyme are:

Rhyming words are:

Bored

and

Reward

They are / are not from the same word family.

Other words that rhyme are:

Rhyming words are:

Stalk

and

Walk

They are / are not from the same word family.

Other words that rhyme are:

Zookeepers: Pre-Reading Questions

What kinds of animals live in zoos?

What do zookeepers do?

What is an endangered species?

Why are zoos important for endangered species?

What happens with baby animals born at a zoo?

Do zookeepers spend a lot of time inside the enclosures with large animals or predators?

Zookeepers: Writing Prompts

Objective Core Language Arts, Speaking and Listening: Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

Retell stories, including key details, and demonstrate understanding of their message or lesson.

Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

Imagine you are a zookeeper. Write about what your day is like.

Pretend you are an inanimate (non-living) object in a zoo. Some inanimate objects in zoos are fences, shovels, pails, carts, and buildings. What kinds of things do you do and see?

Write a short story about a zoo using these vocabulary words: zookeeper, endangered, monkey, exotic, and conserve.

Zookeepers: Word Search

Find the hidden words. Even non-reading children can match letters to letters to find the words! Easy—words go up to down or left to right (no diagonals). For older children, identify the coordinates of the first letter in each word (number, letter).

	A	B	C	D	E	F	G	H	I	J
1	N	I	K	C	X	E	R	L	P	O
2	W	A	C	E	O	U	H	E	W	V
3	E	H	O	M	E	B	I	J	L	I
4	X	D	N	Z	X	V	N	E	I	S
5	H	Q	S	U	O	S	O	F	G	I
6	K	D	E	B	T	M	O	N	C	T
7	I	R	R	E	I	W	I	L	D	O
8	C	A	V	P	C	S	I	C	L	R
9	K	E	E	X	H	I	B	I	T	I
10	S	R	O	N	M	A	D	O	P	T

ADOPT
CONSERVE
EXHIBIT
EXOTIC
HOME
RHINO
VISITOR
WILD

Aquariums: Pre-Reading Questions

1. Do any animals other than fish live in an aquarium?
2. What kinds of jobs are there for people who work in an aquarium?
3. What habitats do animals in an aquarium come from?
4. Name some animals that you think might live in an aquarium.
5. Do aquariums help animals that are threatened or endangered?

Aquariums: Writing Prompts

Objective Core Language Arts, Speaking and Listening: Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

Retell stories, including key details, and demonstrate understanding of their message or lesson.

Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

1. Imagine you are an animal in an aquarium. Describe the people you see every day, such as aquarium workers, volunteers, and visitors. What do they look like? What do they do?
2. Name some tasks that aquarium workers do. Are there any that you would like to do?
3. Pretend you work in an aquarium and write about your work day.
4. What kind of exhibit would you like to see in an aquarium? Draw your aquarium and label which animals you want in each tank. Things to think about: how can workers access the tank to clean it and feed the animals? If you have predators and prey in the same tank, how can you keep one animal from eating the others?

Aquariums: Word Families & Rhyming Words

Language Arts, Reading Standards: Foundational Skills, Recognize and produce rhyming words.
Word families are groups of words that have some of the same combinations of letters in them that make them sound alike...or rhyme. For example ad, add, bad, brad (Brad), cad, Chad, clad, dad, fad, gad, glad, grad, had, lad, mad, pad, plaid (silent 'i'), sad, shad, and tad all have an "ad" letter combination and rhyme.

- Find and write down rhyming words in the poem.
- Are they in the same word family?
- If so, circle the combination of letters that are the same.
- Can you think of more words in the word family?

Rhyming words are:

Sea

and

See

They are / are not from the same word family.

Other words that rhyme are:

Rhyming words are:

Manta ray

and

Stay

They are / are not from the same word family.

Other words that rhyme are:

Rhyming words are:

Feed

and

Seed

They are / are not from the same word family.

Other words that rhyme are:

Rhyming words are:

Teach

and

Beach

They are / are not from the same word family.

Other words that rhyme are:

Raptor Centers: Pre-Reading Questions

1. After looking at the cover and reading the title, what do you think this book is about?
2. Read the list of “animals in this book” in the book jacket. How many of these animals have you heard of? Can you think of anything they have in common?
3. What is a bird of prey?
4. What would you call a place that helps sick or injured birds of prey?
5. What kinds of things could injure a raptor?
6. How can a veterinarian help an injured raptor?
7. Do raptors ever need surgery?
8. Where could you go if you wanted to see an eagle up close?
9. What do raptors eat?
10. What are some ways to help baby raptors who are injured or orphaned?
11. What are some things that staff in a raptor center might do to help the birds of prey?
12. What are ways that volunteers can help the staff and the birds at a raptor center?

Raptor Center: Writing Prompts

Objective Core Language Arts, Speaking and Listening: Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

Retell stories, including key details, and demonstrate understanding of their message or lesson.

Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

1. Why do you think people should help raptors?
2. What are some ways that people can help raptors?
3. Imagine you are a lost baby raptor who has been rescued by a raptor center. Describe what happens to you.
4. If you wanted to work at a raptor center, how would you prepare for that job?
5. A bird comes to the raptor center with a broken wing. What happens to the bird when it arrives and what are the steps the staff should take to help the raptor?
6. Describe what your day might be like if you worked in a raptor center.
7. What do raptor centers try to do with raptors that are old enough or have healed enough to return to the wild?
8. Can you think of any reasons a raptor might not be able to go back to the wild?
9. If a raptor cannot return to the wild, what might happen to it?
10. Taking care of birds in a raptor center is a lot of work! Ask your parent, teacher, or another adult to help you find a raptor center in your area. Write a “thank you” letter to the workers and volunteers who take care of the animals.
11. What is the difference between a diurnal animal and a nocturnal animal? Are humans nocturnal or diurnal?
12. If you have “eyes like a hawk,” does that mean you can see really well or not at all?

Raptor Centers: Sequence Sentence Strips

Objective Core Language Arts:

Use temporal words and phrases to signal event order.

Cut into sentence strips, laminate if desired, and place in a “center.” Have children put the events in order that make sense. Children may work alone or in small groups. Cards are in order but should be mixed up when cut apart. The answer will spell a word.

B. Even excellent hunters with keen eyesight, sharp talons, and strong beaks can break bones and damage their feathers. Fishing lines ensnare these tough birds. They get stuck in mud. They fly into windows.

R. Just like in an emergency room, when a patient comes in, the staff evaluate her. Usually, it takes two people to carefully check the whole bird: eyes, beak, wings, body, tail, talons, and feathers.

I. If help is needed, volunteers rush the animals to the center or the experts go out to save them.

S. After weeks of healing, growing, exercising their wings, and learning or re-learning to hunt, they are ready to go back to the wild. At some centers, the birds are banded before they are released. With joy, raptor helpers take them to specific areas and let them go.

D. Raptor helpers decide if a bird needs medicine or just quiet and rest. If a raptor is ill, helpers might draw blood to find out why the bird is sick.

Raptor Centers: Word Search

Find the hidden words. Even non-reading children can match letters to letters to find the words! Easy—words go up to down or left to right (no diagonals). For older children, identify the coordinates of the first letter in each word (number, letter).

	A	B	C	D	E	F	G	H	I	J
1	S	F	T	E	J	V	E	L	O	K
2	E	A	G	L	E	I	P	I	R	O
3	N	L	M	A	S	N	E	C	O	T
4	M	C	I	C	S	P	R	O	T	A
5	A	O	W	L	E	T	C	O	R	L
6	W	N	I	S	S	H	H	P	A	O
7	Q	P	O	W	E	I	R	T	P	N
8	H	A	T	C	H	S	P	I	T	D
9	E	R	B	H	A	W	K	L	O	A
10	C	K	W	I	D	O	B	I	R	D

BIRD
EAGLE
FALCON
HATCH
HAWK
JESSES
OWL
PERCH
RAPTOR
TALON

Edible Sorting and Classifying Activity

Objective Core Language Arts Vocabulary Acquisition and Use: Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

Objects and materials can be sorted and described by their properties. (color, shape, size, weight and texture)

Use whole numbers, up to 10, in counting, identifying, sorting, and describing objects and experiences.*

Gather a cup of edible “sorting items.” For example:

- As many different kinds of M&Ms as you can find
- Chocolate & peanut butter chips
- Hershey Kisses
- Peanuts or other type of nuts



Ask the children to sort the items into groups. There is no right and wrong, only what makes sense to the child. When finished, ask the child:

What feature or attribute (color, size, ingredient, etc.) did you use to sort the items?

- Are there some items that fit more than one group or don't fit any group?
- If so, how did the child decide which attribute was more important?
- 1. How are various objects similar and different?
- Is it easy to sort or were there some items that were a little confusing?

If more than one person did this, did everyone sort by the same attribute? To extend the learning, graph the attributes used to sort the items (blank graph below).

Graph the attributes that children used to sort their items. (Graph provided on next page).

What was the most common attribute (size, shape, color, etc.) used?

10				
9				
8				
7				
6				
5				
4				
3				
2				
1				
attribute				

Classifying Animals

Objective: Classify organisms according to one selected feature, such as body covering, and identify other similarities shared by organisms within each group formed.

Describe several external features and behaviors of animals that can be used to classify them (e.g., size, color, shape of body parts).

Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals.

Just as we sort candy, scientists sort all living things into groups to help us understand and connect how things relate to each other. Scientists ask questions to help them sort or classify animals.

Based on the answers to the questions, scientists can sort the living organisms. The first sort is into a Kingdom. There are five commonly accepted Kingdoms: Monera, Protista, Fungi, Plantae, and Animalia. All of the living things in this book belong to Animalia or the Animal Kingdom.

The next big sort is into a Phylum. One of the first questions that a scientist will ask is whether the animal has (or had at some point in its life) a backbone. If the answer is “yes,” the animal is a vertebrate. If the answer is “no,” the animal is an invertebrate.

Each Phylum is broken down into Classes, like mammals, birds, reptiles, fish, amphibians, insects, or gastropods (snails). Then each class can be broken down even further into orders, families, genus and species, getting more specific.

The scientific name is generally in Latin or Greek and is the living thing’s genus and species. People all over the world use the scientific names, no matter what language they speak. Most living organisms also have a common name that we use in our own language.

Using what you know, and information and pictures in the book, see how many Animal Chart squares you can fill in for each animal.

Vertebrate Classes

Objective: Compare structures (e.g., wings vs. fins vs. legs; gills vs. lungs; feathers vs. hair vs. scales) that serve similar functions for animals belonging to different vertebrate classes

Birds:

feathers



backbone (vertebrate)

inside skeleton (endoskeleton)

lungs to breathe

hatch from hard-shelled eggs

warm-blooded

Warm-blooded animals make their own heat and have a constant body temperature

Mammals:

hair, fur, whiskers, or quills at some point during their lives

backbone (vertebrate)

inside skeleton (endoskeleton)

lungs to breathe

most give birth to live young

produce milk to feed young

warm-blooded



Using the sorting cards, sort the animals into their class.

Animal Chart

	Animals		
Appendages	legs (how many)		
	flippers/fins		
	wings		
	tail/no tail		
	horns/antlers		
Feet or hands: if they have; may have more than one	claws		
	web		
	toes		
	opposable thumbs/toes		
	hooves		
Movement: may do more than one	walks/runs		
	crawls		
	flies		
	slithers		
	swims		
	climbs		
	hops		
Backbone	backbone/vertebrate		
	no backbone/invertebrate		
Skeleton	inside skeleton (endoskeleton)		
	outside skeleton (exoskeleton)		
	no skeleton		
Body covering	hair/fur/whiskers/quills		
	feathers		
	dry scales or bony plates		
	moist scales		
	smooth, moist skin		
	hard outer shell		
Color/patterns	stripes or spots		
	mostly one color		
	skin color changes		
	bright, vivid colors		
Gets oxygen	lungs		
	gills		
Body temperature	warm-blooded (endothermic)		
	cold-blooded (ectothermic)		
Babies	born alive		
	hatch from eggs		
	born alive or hatch from eggs		
Metamorphosis	complete		
	incomplete		
	none		
Teeth	sharp		
	flat		
	no teeth (bill/beak)		
Food	plant eater (herbivore)		
	meat eater (carnivore)		
	both (omnivore)		

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Comparing Animals

Objective: Classify organisms according to one selected feature, such as body covering, and identify other similarities shared by organisms within each group formed.

Describe several external features and behaviors of animals that can be used to classify them (e.g., size, color, shape of body parts).

Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals.

Use the Venn Diagrams to compare and contrast different animals from the book. The following questions can be a starting point. What other questions can you think of? What descriptive words can you use to talk about each animal?

Some questions scientists ask:

- Does it have a backbone?
- What type of skin covering does it have?
- Does it have a skeleton? If so, is it inside or outside of the body?
- How many body parts does the animal have?
- Does it get oxygen from the air through lungs or from the water through gills?
- Are the babies born alive or do they hatch from eggs?
- Does the baby drink milk from its mother?
- Is it warm-blooded or cold-blooded?





Animal Sorting Cards

Objective: Classify organisms according to one selected feature, such as body covering, and identify other similarities shared by organisms within each group formed.

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Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals.

Animal Card Games:

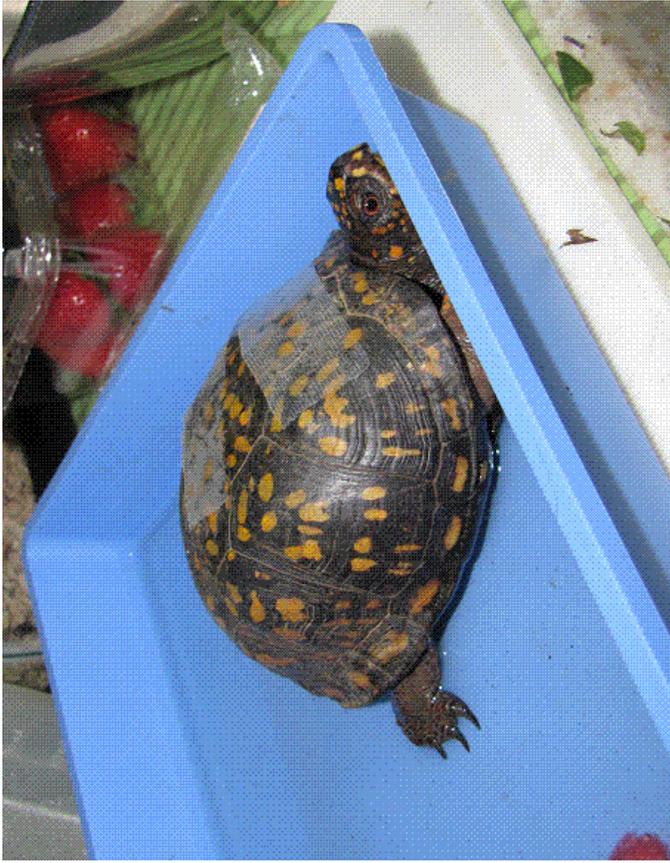
Sorting: Depending on the age of the children, have them sort cards by:

where the animals live (habitat)	tail, no tail
number of legs (if the animals have legs)	colors or skin patterns
how they move (walk, swim, jump, or fly)	animal class
type of skin covering (hair/fur, feathers, scales, moist skin)	
what they eat (plant eaters/herbivores, meat eaters/carnivores, both/omnivores)	

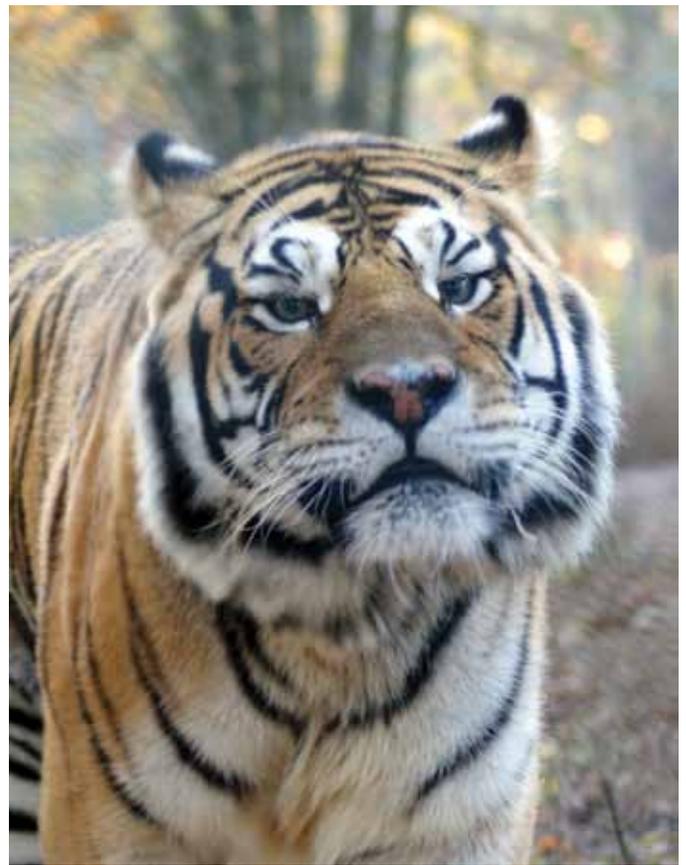
Memory Card Game: Make two copies of each of the sorting card pages and cut out the cards. Mix them up and place them face down on a table. Taking turns, each player should turn over two cards so that everyone can see. If the cards match, he or she keeps the pair and takes another turn. If they do not match, the player should turn the cards back over and it is another player's turn. The player with the most pairs at the end of the game wins.

Who Am I? Copy and cut out the cards. Poke a hole through each one and tie onto a piece of yarn. Have each child put on a "card necklace" without looking at it so the card hangs down the back. The children get to ask each person one "yes/no" question to try to guess "what they are." If a child answering the question does not know the answer, he/she should say, "I don't know." This is a great group activity and a great "ice-breaker" for children who don't really know each other.

Charades: One child selects a card and must act out what the animal is so that the other children can guess. The actor may not speak but can move like the animal and imitate body parts or behaviors. For very young children, you might let them make the animal sound. The child who guesses the animal becomes the next actor.













Adaptations

Objective: Identify adaptations that help plants and animals survive and grow in their environment

Identify external parts of plants and animals

Observe and compare the structures and behaviors of different kinds of plants and animals

Adaptations help animals to live in their habitat: to get food and water, to protect themselves from predators, to survive weather, and even to help them make their homes. Here are a few different types of adaptations.

Physical Adaptations

Use the illustrations in the book to see how many physical adaptations you can see for each animal.

body parts

teeth—depends on type of food eaten
feet, flippers, fins—ability to move
placement of eyes
gills, lungs, or other—how does the animal get oxygen
ears—or how the animal hears/senses

body coverings

hair or fur
feathers
scales
moist skin

camouflage and protection

color of skin or pattern to blend into background
body structure resembles another organism to fool predators
poisonous or stinky smells

Behavioral Adaptations

instinct: behaviors or traits that the animals are born with
learned behavior: traits that animals learn to improve their chances of survival or to make their life easier
social groups versus solitary living
communication with other animals
defense
hiding in an area that provides camouflage
reaction to cycles (day/night, seasons, tides, etc.)
migration: the seasonal movement of animals from one location to another
hibernation: a long, deep sleep in which the animal's breathing and heartbeat are slower than usual

Pick an animal from the book and answer the following questions:
My animal is:

<p>Where (in what kind of habitat) does your animal live?</p>	<p>What is one of its physical adaptations and how does it help the animal live in its environment?</p>
<p>What is another of its physical adaptations and how does it help the animal live in its environment?</p>	<p>What is another of its physical adaptations and how does it help the animal live in its environment?</p>

Science Journal (Vocabulary)

wildlife rehabilitator

my definition

my drawing

veterinarian

my definition

my drawing

orphan

my definition

my drawing

injured

my definition

my drawing

sanctuary

my definition

my drawing

exotic

my definition

my drawing

tranquilize

my definition

my drawing

rescue

my definition

my drawing

endangered

my definition

my drawing

adopt

my definition

my drawing

ZOO

my definition

my drawing

conserve

my definition

my drawing

aquarium

my definition

my drawing

volunteer

my definition

my drawing

salt-water

my definition

my drawing

fish

my definition

my drawing

raptor

my definition

my drawing

surgery

my definition

my drawing

wing

my definition

my drawing

flight cage

my definition

my drawing

Carrying an Animal to a Rehabilitator

If you have found an animal that needs to be taken to a wildlife rehabilitator, you should have an adult help with the animal. Wild animals consider humans to be predators and will particularly be afraid of any human approaching them if they are already injured. Special care needs to be taken to avoid injuring the animal further or to prevent the animal from injuring you.

General safety concerns (for you and the animal):

- If possible, let a professional get the animal.
- If you are asked to take the animal to the rehabilitator, you should always wear gloves to protect yourself from bites or scratches, especially with bats, raccoons, foxes, or skunks as they could carry rabies.
- Place a towel or paper towel in the bottom of a box. Don't use grass as it could actually harm some animals.
- If trying to get an animal into a box, use a piece of cardboard to help slide the animal into the box. Or if you have to put the box over the animal, use the cardboard to slide under the bottom to contain the animal.
- Once the animal is in the box, remove the sheet or towel from the top of the bird. Small mammals can stay wrapped in the sheet or towel if necessary.
- Once the animal is in the box, carefully poke small holes for air but be sure you don't poke the animal!
- Once the animal is in a box, don't touch it.
- Don't give the animal anything to eat or drink.
- Keep pets away from any wild animal, even if they are in the box.
- Get the animal to a wildlife rehabilitator as soon as you can.

Math

	length		weight	
	in/ft	cm/m	lb.	kg.
bobcat	33	85	22	10
opossum	30	76	10	4.5
raccoon	30	76	19	8.6
white-tailed deer	75	90	200	91
you (height versus length)				

What standard measuring tool would you use to measure something in:

Inches or centimeters

Feet or meters

Pounds or kilograms



Try to imagine how big or small something is compared to something you know.

What are some other things about the same size?

What is something that weighs about the same?

How big is it?

Using the right measuring tool (yard stick or measuring tape) and chalk, mark off how big something is on the playground, sidewalk, or driveway.

If you were to lie down on or next to the line, how many times would you have to lie down in order to equal the size?



Glossary

Word	Definition	Part of Speech	Spanish
alone	separate, apart, isolated	adjective	solo
baby	young	adjective	bebé, joven
baby (ies)	human or animal young	noun	bebé, niño
bandage	a piece of soft material that covers and protects an injured part of the body	noun	venda
biology	the scientific study of living organisms	noun	biología
bird	a warm-blooded vertebrate that breathes oxygen with lungs, has a beak, feathers, two wings, two legs, and lays eggs; birds are the ONLY animals that have feathers; not all birds fly	noun	ave, pájaro
bleed	blood flowing from body	verb	sangrar
bobcat	a common North American lynx, reddish in base color with dark markings	noun	gato montés, lince
bone	the hard tissue that makes the skeleton of vertebrates.	noun	huesos
broken	cracked or damaged	adjective	quebrado
burrow	an animals' hole or excavation in the ground used as a shelter or place to live	noun	madriguera
cast	a hard covering to protect a broken bone or injured body part	noun	enyesado
cast	to cover a broken bone with a hard covering so it can heal	verb	enyesar
catbird	a songbird that sounds like a cat meowing	noun	ave del paraíso
chatter	to talk very fast, for animals to make short, high noises	verb	chillar
dawn	the first appearance of light in the morning followed by sunrise	noun	amanecer

Word	Definition	Part of Speech	Spanish
deep	to a great depth	adjective	profundo
disease	an illness	noun	enfermedades
doe	adult female of some species, e.g. antelope, gerbil, hamster, hare, mouse, pronghorn, rabbit, rat, squirrel, goat, kangaroo, sheep, deer	noun	cierva
drink	to bring liquid into the body usually through the mouth; Dolch Sight word, grade 3	verb	beber, tomar
dusk	twilight, as day turns to night	noun	crepúsculo
egg	a rounded reproductive object from which animals hatch (birds, amphibians, reptiles, insects, fish)	noun	huevo, óvulo (biol.)
EMT	Emergency Medical Technician, a first-responder to the scene of an accident	noun	paramédico
eyedropper	a tube with a piece of rubber on the end squeezed to put liquid medicine into your eye	noun	cuentagotas
fall	to move quickly down, usually by accident	verb	bajar, descender
fawn	the young of an animal such as deer	noun	cervato
feathered	covered with feathers	adjective	plumado
feathers	a bird's body covering	noun	plumas
feed	to give food	verb	dar de comer
firefighters	community workers who fight and put out fires	noun	bomberos
fledgling	a young bird just learning to fly	noun	emplumece
food	what is eaten to sustain life, provide energy, promote growth, etc	noun	alimento
fur	the hairy coat of a mammal	noun	pelaje, pieles
habitat	the environment in which an organism lives, including living and nonliving parts	noun	hábitat

Word	Definition	Part of Speech	Spanish
hatch	to emerge from an egg, pupa, or chrysalis	verb	incubar
healthy	the condition of being free from sickness or disease	adjective	saludable
hide	to put something or be somewhere that none can find or see	verb	esconder
hurt	a feeling of pain	noun	herido
instinct	behavior patterns with which an animal is born	noun	instinto
lay	to produce (an egg)	verb	poner
mammal	a warm-blooded vertebrate that breathes with lungs and is covered with hair/fur (at some point in its life); females produce milk to feed their live offspring	noun	mamífero
medicine	something that treats symptoms of disease	noun	medicina
mend	to fix a tear or hole in something	verb	arregla
missing	something not where it should be	adjective	que falta
mother	a female parent	noun	madre
mourning dove	a type of dove with a mournful or sad call	noun	tórtola
nest	a place used by birds, insects, fishes, turtles, rabbits, etc, for depositing their eggs or raising young	noun	nido
nestle	to lie in a safe, comfortable position	verb	estar acurrucado
nestling	a young bird that is too young to leave the nest	noun	cría recién nacida
opossum	small to medium-sized marsupial, with the largest about the size of a large house cat, and the smallest the size of a mouse, also called possums	noun	zarigüeya

Word	Definition	Part of Speech	Spanish
orphaned	without parents	adjective	como un huérfano
osprey	a large fish-eating seabird	noun	águila pescadora, guincho
parent	any organism that produces or generates another, egg mother and father	noun	padre
pet	an animal kept in people's homes	noun	domésticos
predator	an animal that depends on or preys on other animals for food	noun	animal de rapiña, predadores
pup	the young of certain animals, e.g., guinea pig, prairie dog, gerbil, hamster, sea lion, seal, shark, dog, armadillo, bat, mole, squirrel, beaver, mouse, rat, coyote, wolf	noun	cachorro, cría de foca
rabbit	burrowing animals with long ears and short tails; some domesticated for pets	noun	conejo
raccoon	a nocturnal mammal native to North America and Central America, easily recognized by its "mask" face	noun	mapache
raise	to bring up	verb	criar, cultivar
reptile	a cold-blooded, air-breathing animal with scales or plates and a backbone; most hatch from eggs (snakes, turtles, crocodiles)	noun	reptil
rescue	to save someone or something from harm	verb	salvar
sanctuary	a place to be safe	noun	santuario
shell	hard outer covering of some arthropods and turtles	noun	caparazónm, concha

Word	Definition	Part of Speech	Spanish
shelter	a structure that provides privacy and protection from danger	noun	lugar protegido
sick	not healthy, ill	adjective	enfermo
split	broken into more than one piece, cracked	adjective	partido
survive	to remain alive or in existence	verb	sobrevivir
tangled	mixed up	adjective	enredado
veterinarian	a medical doctor for animals	noun	veterinario
wild	in a natural state, not tame	adjective	salvaje
wildlife	large wild animals like deer, mice, birds, etchant have not been domesticated for human use	noun	fauna
wildlife rehabilitator	a professional who cares for sick, orphaned, or injured wild animals with the goal of releasing them back to the wild	noun	Rehabilitadores de animales salvajes
young	someone or something that has not been alive for long	adjective	joven
young	the thing that has not been alive for long	noun	joven

Answers

Rehabilitator Silly Sentences

1. Mother RABBITS FEED their young at DUSK and at DAWN. If you see baby rabbits (bunnies) NESTLED in a FUR-lined nest, they are probably just left alone.
2. A FAWN HIDING in DEEP grass near the back of your yard is probably just waiting for its mother to come back to FEED her.
3. A BABY squirrel with very thin FUR and eyes that are still closed is on the ground and the mother is CHATTERING. It probably fell from the NEST. Keep PETS away so the MOTHER can get the baby and put her back in the nest.
4. A fully FEATHERED baby bird (FLEDGLING) is sitting quietly on the ground. Keep PETS away so the PARENTS can care for it.
5. A NESTLING FELL_out of the nest. You may be able to place him back into that NEST if he is not hurt. Then, watch for parents.
6. If a BABY ANIMAL is sitting near an animal that appears dead, you should call a WILDLIFE REHABILITATOR.

Rehabilitator Word Search

	A	B	C	D	E	F	G	H	I	J
1				I	N	J	U	R	E	D
2					H				W	
3			S	B	U				I	
4			Q	I	R				L	
5		H	U	R	T	F	E	E	D	
6			I	D					L	
7		O	R	P	H	A	N		I	
8			R	E	S	C	U	E	F	
9		M	E	D	I	C	I	N	E	
10			L							

BIRD 3,D
 FEED 5,F
 HURT 5,B
 INJURED 1,D
 MEDICINE 9,B
 ORPHAN 7,B
 RESCUE 8,C
 SQUIRREL 3,C
 WILDLIFE 2,I

Sanctuaries Silly Sentences

1. Long ago, wild animals only lived in the wild.
2. Exotic animals are expensive to keep and can't be released back into the wild.
3. Canadian lynx Kiki no longer has claws.
4. Because they cannot see, they are unable to stalk and pounce on their prey—like rabbits and mice.
5. Just like humans, animals are put to sleep for surgeries.
6. This jaguar was tranquilized so the dentist could check his teeth.
7. The animals are smart and seem to enjoy training.
8. They quickly learn that following commands leads to tasty treats.
9. The big cats will show how much they love playing with their new toys by batting them and drooling all over them.

Zookeepers: Word Search

	A	B	C	D	E	F	G	H	I	J
1							R			
2			C				H			V
3		H	O	M	E		I			I
4			N		X		N			S
5			S		O		O			I
6			E		T					T
7			R		I	W	I	L	D	O
8			V		C					R
9			E	X	H	I	B	I	T	
10						A	D	O	P	T

ADOPT	10, F
CONSERVE	2, C
EXHIBIT	9, C
EXOTIC	3, E
HOME	3, B
RHINO	1, G
VISITOR	2, J
WILD	7, F

Raptor Centers: Sequence Sentence Strips

BIRDS

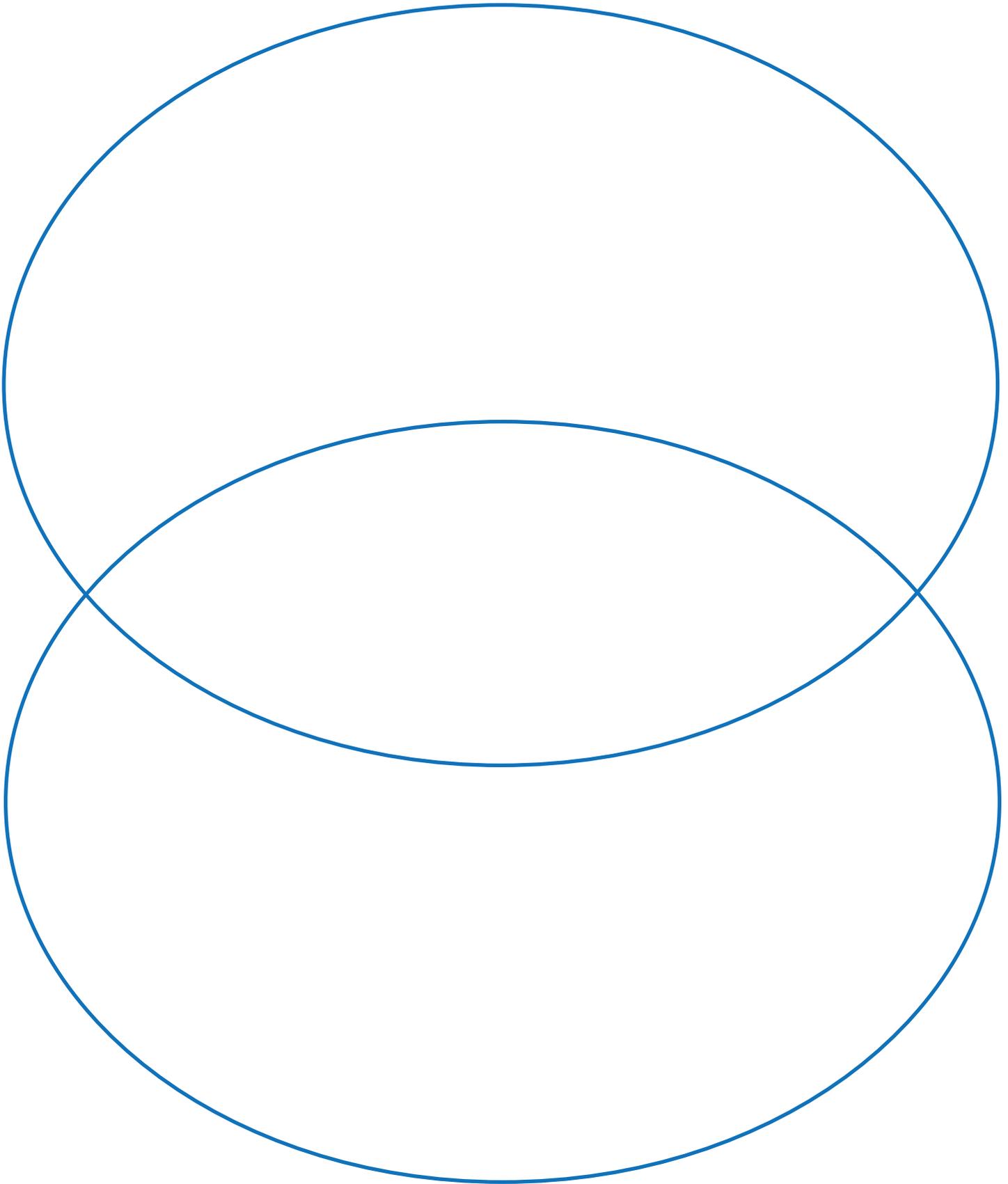
Raptor Center: Word Search

	A	B	C	D	E	F	G	H	I	J
1		F			J					
2	E	A	G	L	E		P			
3		L			S		E			T
4		C			S		R			A
5		O	W	L	E		C		R	L
6		N			S		H		A	O
7									P	N
8	H	A	T	C	H				T	
9									O	
10							B	I	R	D

BIRD	10,H
EAGLE	2,A
FALCON	1,B
HATCH	8,A
HAWK	9,D
JESSES	1,E
OWL	5,B
PERCH	2,G
RAPTOR	5,I
TALON	3,J

Appendix B—Venn Diagram

Compare and contrast two animals featured in the book or books.



Appendix C—U.S. Map

