

SAME AND DIFFERENT

Where do I fit in?

INTRODUCTION:

On this Expedition, your students will explore the question, “Where do I fit in?” by learning how to compare identifying characteristics of animals. They will practice grouping and sorting, and then apply those skills as they observe animals at the Museum. When they return to class, they will pool their data and compare specific animals.

SUMMARY:

Pre-Visit Activities:

1. The class compares two students or objects, looking for similarities and differences, (eye & hair color, clothing, etc.) and then completes a Venn diagram to model it
2. Using their shoes, the class plays a sorting game, practicing answers to the question, “How did you sort the shoes?”
3. Have a class discussion about how animals are sorted and classified in nature; this is a good time to introduce or review the vocabulary for the unit

Museum Visit Activities:

1. Students study animals around the Museum (from the *Desertarium*, outdoor exhibits, etc.) using a characteristics chart as a guide and identifying animals that match specific characteristics
2. At the *Birds of Prey Center*, students compare and contrast two birds using a blank Venn diagram
3. Students explore the *Spirit of the West* exhibit, searching for animals to fit riddles in each scene

Post Visit Activities:

1. Students use the data they collected to create large classification chart; they may draw animals they saw at the Museum, or could also add animals not seen there
2. Each student will complete a Venn diagram comparing two animals from the Museum
3. Students or small groups will do a more in-depth study of an animal, completing a written report with an art project and presentation

VOCABULARY:

group, sort, classify, animal, wildlife, vertebrate, fish, mammal, bird, reptile, amphibian, characteristics, similar, different, compare, contrast

Science

Grade Level: 2-3

Oregon State Standards & Benchmarks:

Organisms:

- Recognize characteristics that are similar and different between organisms
- Describe how related plants and animals have similar characteristics

Bend-LaPine School District Curriculum:

Life Science:

- Sort and classify plants and animals (2)

Physical Science:

- Describe objects (2)

Inquiry:

- Write simple observations, collect data (3)

PRE-VISIT ACTIVITIES

LET'S COMPARE

Guided by the teacher, the class compares two students or objects, looking for similarities and differences (eye & hair color, clothing, etc.). Make a list of similarities and differences, and complete a Venn diagram to model with the class so they can see how to make one. You may want to assign another as homework for practice.

Suggested books for this topic:

- Sets: Sorting Into Groups by Michele Koomen
- Sorting at the Ocean by Jennifer Rozines Roy & Gregory Roy
- Spot the Difference Series (Ears, Eyes, Mouths) by Daniel Nunn
- What's the Difference: A Guide to Some Familiar Animal Look-Alikes by Elizabeth A. Lacey
- Wet & Dry: An Animal Opposites Book by Lisa Bullard
- Biggest, Strongest, Fastest by Steve Jenkins
- The Great Animal Search by Caroline Young
- Do Bears Give Bear Hugs?: First Questions and Answers About Animals
- Zoo-ology by Joelle Jolivet
- Mammals: A True Book by Melissa Stewart
- All About Birds by Anita Ganeri

WHOSE SHOE?

Using their shoes, the class plays a sorting game. Have everyone take off one shoe and place it in the middle of a circle. Then sort the shoes into two groups and have students guess, "How did you sort the shoes?" See how many different ways you can sort the shoes into two separate groups based on shoe characteristics.

DIFFERENT ANIMALS

Have a class discussion about how animals are sorted and classified in nature. Questions might be:

- How do we know animals are not all the same?
- What kinds of things do we use to describe different groups of animals?
- What kinds of animals do you think you'll see at the Museum?

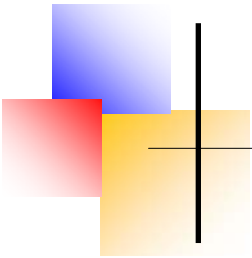
This is also a good time to introduce or review the vocabulary for the unit.

PREPARING FOR YOUR MUSEUM VISIT

Students: As the day of your Museum visit approaches, focus your students' thoughts on what they might experience at the Museum and how that fits in with what they are studying. Preparation should not be entirely academic, however; clarify students' expectations about things such as bathrooms, lunch plans, who they will spend the day with, etc. to alleviate unnecessary anxiety or disappointment.

Chaperones: Don't forget to prepare your chaperones! They are a valuable resource; use them to help make your field trip an educational success! Send them a letter explaining your educational goals/focus for the trip. Outline the tasks they will be responsible for throughout the day. Set aside time to talk with your chaperones and answer their questions.

Logistics: Remember to prepare student and/or chaperone materials in advance. Don't forget nametags with your school name, and have your confirmation form and admission fee ready when you arrive to avoid delays as you check in.



LEARNING EXPEDITIONS

HIGH DESERT MUSEUM

SAME AND DIFFERENT

Where do I fit in?

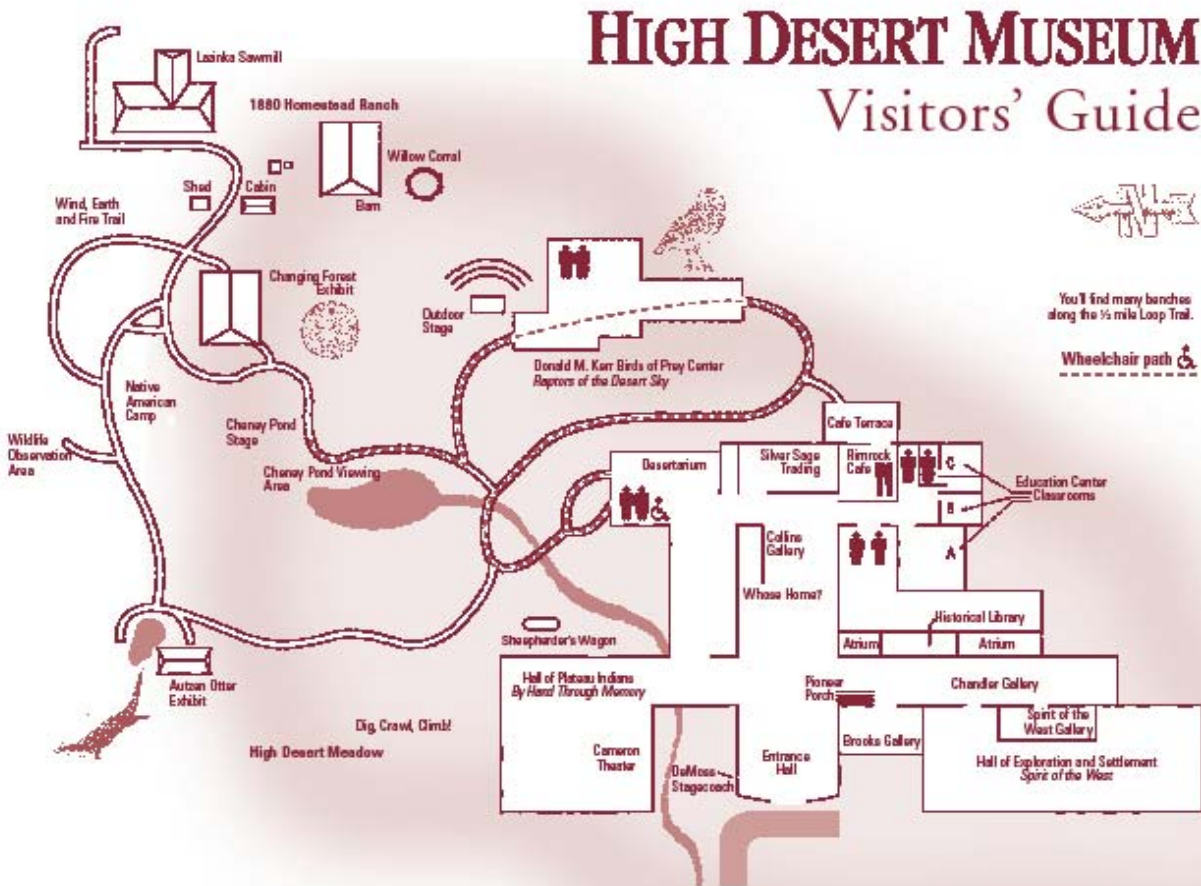
STUDENT PAGES

Grade Level: 2-3

INTRODUCTION:

On this Expedition, you will visit the following areas in order to complete activities related to the theme, 'Same and Different': (you do not have to visit the exhibits in the order listed)

EXHIBIT TITLE	DONE?
Desertarium & outdoor exhibits	
Birds of Prey Center—"Raptors of the Desert Sky"	
Spirit of the West—"Hall of Exploration and Settlement"	



DESERTARIUM & OUTDOOR EXHIBITS

As you visit the animal exhibits around the Museum, look for animals that have the characteristics in the chart below. Fill in the name of the animals you find with those characteristics when you find them.



WHICH ANIMALS HAVE . . .

<p style="text-align: center;">. . . WINGS?</p> <ul style="list-style-type: none"> • _____ • _____ • _____ • _____ • _____ 	<p style="text-align: center;">. . . SCALES?</p> <ul style="list-style-type: none"> • _____ • _____ • _____ • _____ • _____
<p style="text-align: center;">. . . FUR?</p> <ul style="list-style-type: none"> • _____ • _____ • _____ • _____ • _____ 	<p style="text-align: center;">. . . SMOOTH, WET SKIN?</p> <ul style="list-style-type: none"> • _____ • _____ • _____ • _____ • _____
<p style="text-align: center;">. . . LESS THAN 4 LEGS?</p> <ul style="list-style-type: none"> • _____ • _____ • _____ • _____ • _____ 	<p style="text-align: center;">. . . CLAWS ON FEET?</p> <ul style="list-style-type: none"> • _____ • _____ • _____ • _____ • _____

BIRDS OF PREY CENTER

Look around the whole exhibit.

- What live birds do you see today?
- Use the information signs in front of each habitat to help you figure out what kind of bird it is
- Record it in the chart below



WHO IS IN THE . . .

Pine Forest Habitat?

Rangeland and Farmland Habitat?

Streamside and Marsh Habitat?

Mixed Conifer Forest Habitat?

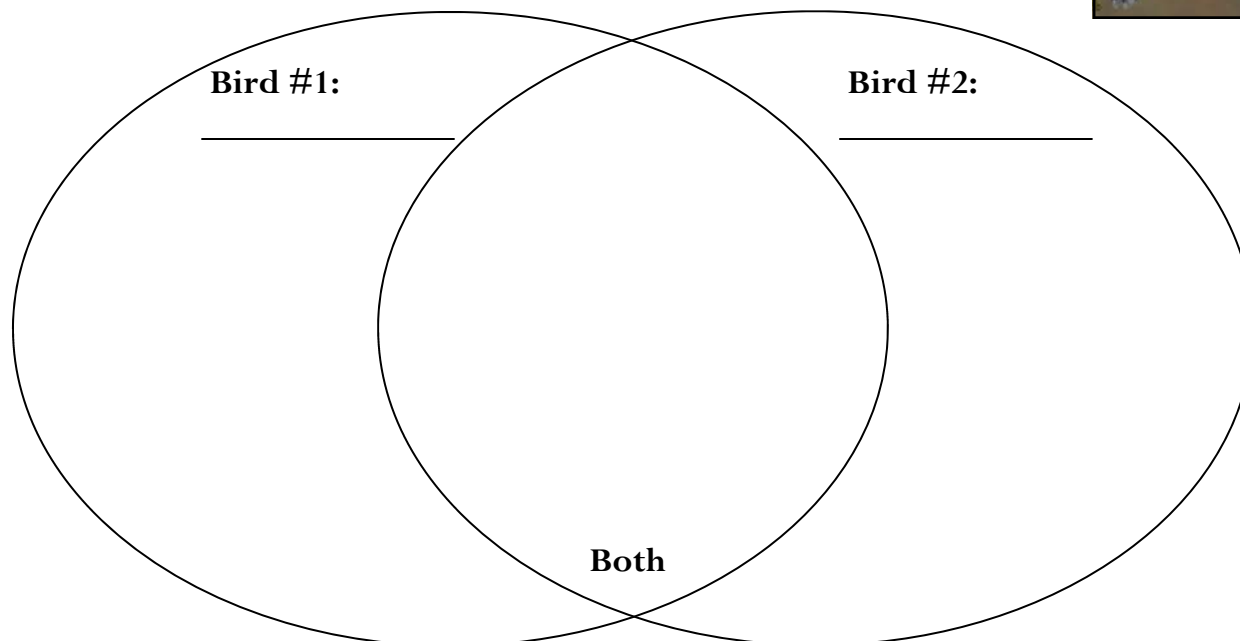
Canyon and Rimrock Habitat?

Back Yard and Roadside Habitat?

WHAT IS A RAPTOR?

Choose two of those birds; look at them closely and list how they are similar and different using the Venn diagram below.

Hint: find the sign that says "A Diverse Group" in the outdoor area - the text there may help you add more characteristics to your diagram.



SPIRIT OF THE WEST

As you explore the exhibit, look for different animals that match the riddles below.

In First Peoples...

Hanging on a cave or wall
Camouflaged and very small
Don't take up much space at all



In Fur Traders...

Creeping in on silent feet
Searching for some tasty meat
An unwelcome guest you shouldn't greet

In Emigrants...

If your wagon train stops near
A rattle & a hiss you'll hear
It's meant to make you pause in fear

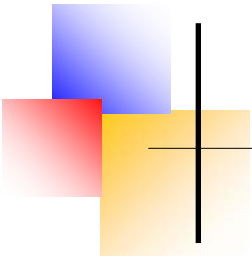
In the Placer Mine...

Perched near the water's edge
Singing while my chicks fledge
I watch the miners dredge

In The Buckaroos...

Hunting in the dark of night
Causing mice to hide in fright
Now perched at the highest height

WHO IS YOUR FAVORITE?
Draw an animal here:



LEARNING EXPEDITIONS

HIGH DESERT MUSEUM

SAME AND DIFFERENT

Where do I fit in?

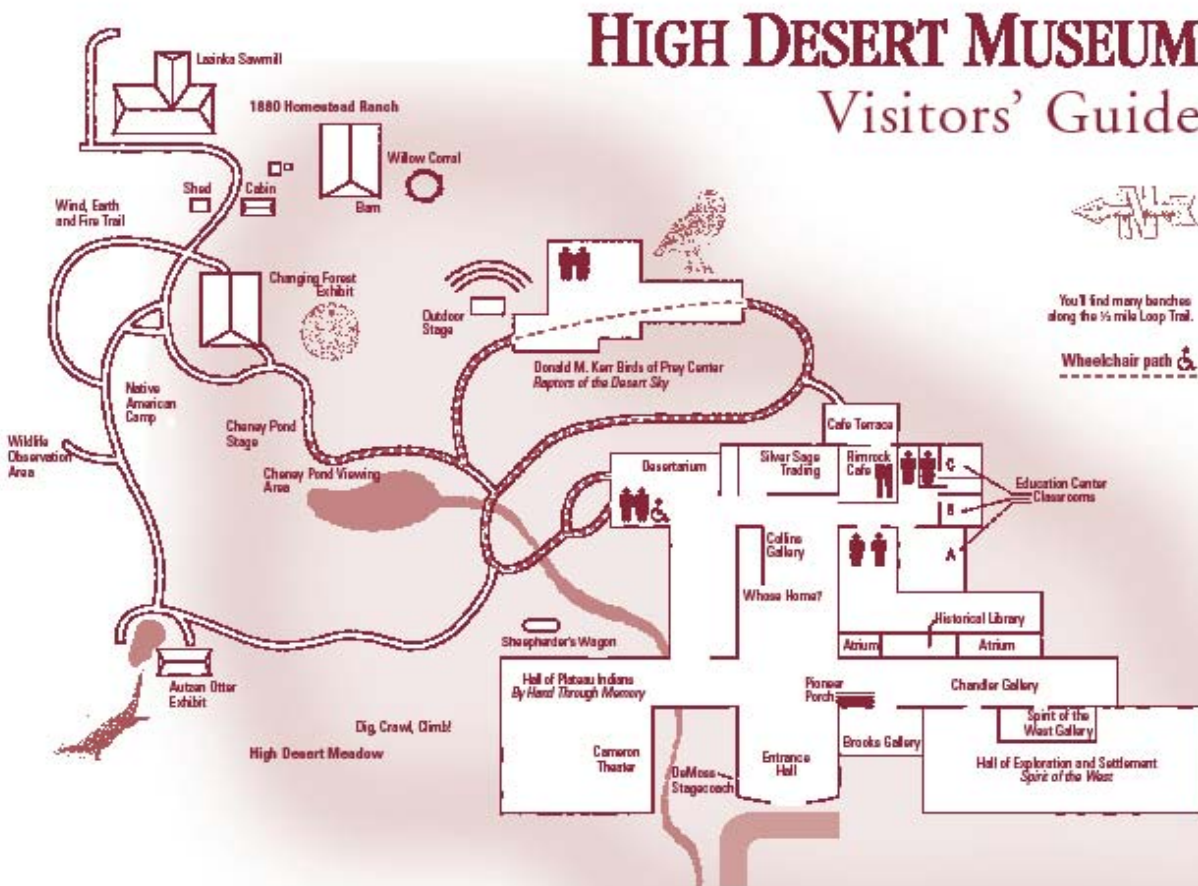
CHAPERONE PAGES

Grade Level: 2-3

INTRODUCTION:

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DESERTARIUM & OUTDOOR EXHIBITS

As you visit the animal exhibits around the Museum, look for animals that have the characteristics in the chart below. Fill in the name of the animals you find with those characteristics when you find them.



WHICH ANIMALS HAVE . . .

Chaperones—help students brainstorm animals; there are many possible answers.

<p style="text-align: center;">. . . WINGS?</p> <ul style="list-style-type: none"> • <i>Birds</i> • <i>Bats</i> • <i>Some insects</i> • <i>Other?</i> 	<p style="text-align: center;">. . . SCALES?</p> <ul style="list-style-type: none"> • <i>Snakes</i> • <i>Lizards</i> • <i>Fish</i> • <i>Other?</i>
<p style="text-align: center;">. . . FUR?</p> <ul style="list-style-type: none"> • <i>Kangaroo rat</i> • <i>Bats</i> • <i>Otters</i> • <i>Porcupines</i> • <i>Ground squirrels</i> 	<p style="text-align: center;">. . . SMOOTH, WET SKIN?</p> <ul style="list-style-type: none"> • <i>Salamander</i> • <i>Frogs</i> • <i>Fish—point out that fish also have scales</i> • <i>Other?</i>
<p style="text-align: center;">. . . LESS THAN 4 LEGS?</p> <ul style="list-style-type: none"> • <i>Birds</i> • <i>Bats</i> • <i>Snakes</i> • <i>Fish</i> • <i>Other?</i> 	<p style="text-align: center;">. . . CLAWS ON FEET?</p> <ul style="list-style-type: none"> • <i>All birds of prey</i> • <i>Mammals, such as wolves, otter, porcupines, etc.</i> • <i>Lizards</i> • <i>Other?</i>

BIRDS OF PREY CENTER

Look around the whole exhibit.

- What live birds do you see today?
- Use the information signs in front of each habitat to help you figure out what kind of bird it is
- Record it in the chart below



Chaperones—help the students determine what birds are on exhibit.

WHO IS IN THE . . .

Pine Forest Habitat?

Usually a Great Horned Owl

Streamside and Marsh Habitat?

Usually Bald Eagles

Canyon and Rimrock Habitat?

Usually a Golden Eagle

Rangeland and Farmland Habitat?

Usually a Prairie Flacon

Mixed Conifer Forest Habitat?

Usually Spotted Owls

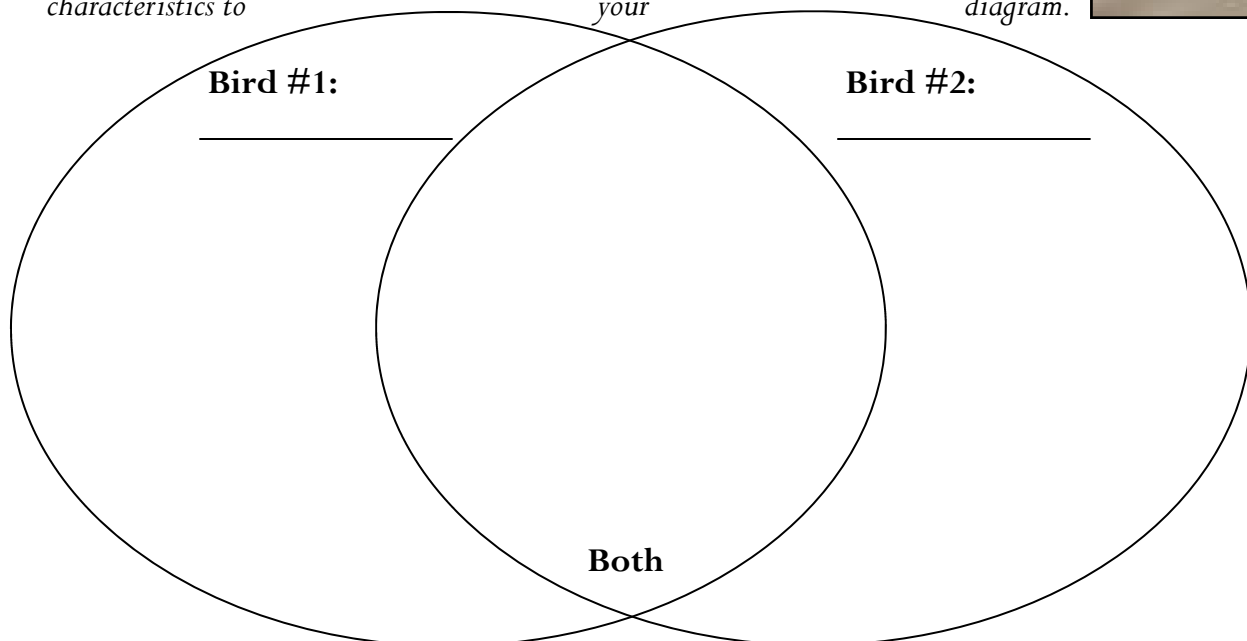
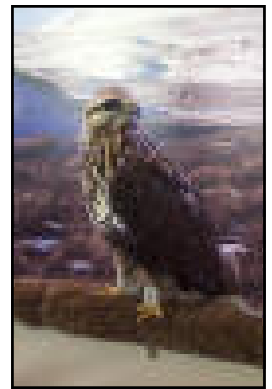
Back Yard and Roadside Habitat?

Varies

SCENE: WHAT IS A RAPTOR?

Choose two of those birds; look at them closely and list how they are similar and different using the Venn diagram below.

Hint: find the sign that says "A Diverse Group" in the outdoor area - the text there may help you add more characteristics to your diagram.



SPIRIT OF THE WEST

As you explore the exhibit, look for different animals that match the riddles below.

Chaperones—help students solve the riddles and find the animals.

In First Peoples...

Hanging on a cave or wall

Camouflaged and very small

Don't take up much space at all

Long-eared bats



In Fur Traders...

Creeping in on silent feet

Searching for some tasty meat

An unwelcome guest you shouldn't greet

A bobcat

In Emigrants...

If your wagon train stops near

A rattle & a hiss you'll hear

It's meant to make you pause in fear

A rattlesnake

In the Placer Mine...

Perched near the water's edge

Singing while my chicks fledge

I watch the miners dredge

A loggerhead shrike (bird)

In The Buckaroos...

Hunting in the dark of night

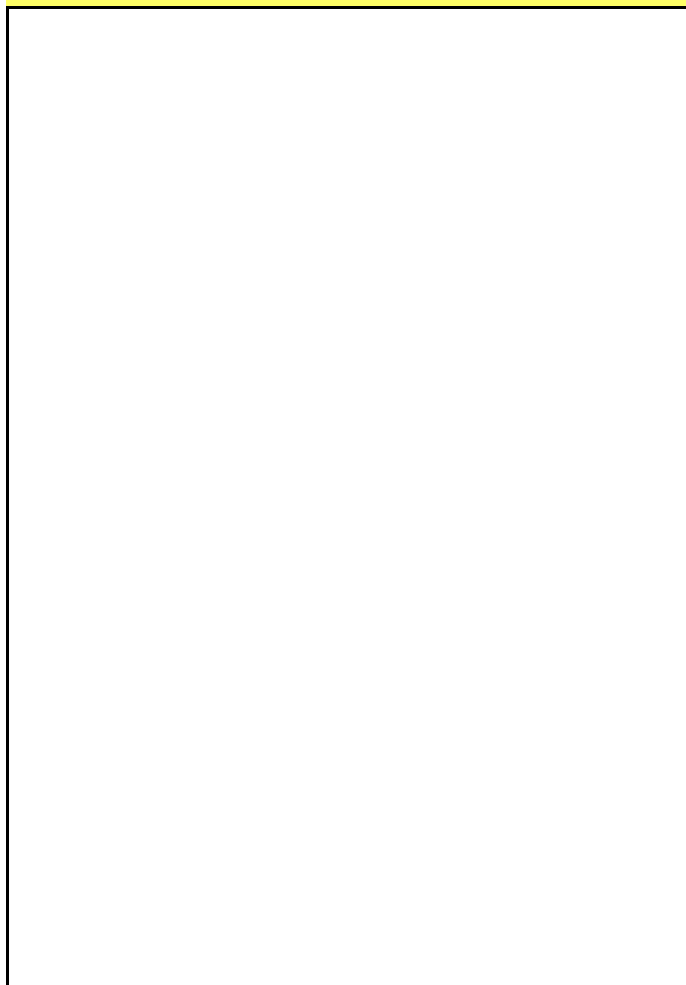
Causing mice to hide in fright

Now perched at the highest height

A great horned owl

WHO IS YOUR FAVORITE?

Draw an animal here:



POST-VISIT ACTIVITIES

CLASSIFICATION CHART

Students use the data they collected at the Museum to create large classification chart. This can be done in several ways:

- They may draw animals they saw at the Museum and the class could group them in different categories
- You could have students contribute animals to a large chart that you create for the five different groups of vertebrates. The five groups are birds, mammals, reptiles, amphibians, and fish.
- Students could share the animals they saw for each of the six characteristics—animals with wings, scales, fur, smooth, wet skin, less than four legs, and claws on feet. Then you could ask them about other animals that weren't at the Museum but which would still fit in the categories.

VENN DIAGRAM

Each student will complete a Venn diagram comparing two animals from the Museum, or they will expand on the Venn diagram of the birds they chose to add illustrations and a mini-report comparing and contrasting those two birds.

LET'S LEARN MORE

Students or small groups will do a more in-depth study of an animal. This could be an animal they saw at the Museum, or one that is completely foreign to this area. Have students complete a written report, possibly with an art project or some other visual aid, and then make a presentation to the class.