

# HIGH DESERT MUSEUM

WILDLIFE *and* LIVING HISTORY

## SELF-GUIDED LEARNING EXPEDITION



# LIFE SCIENCE

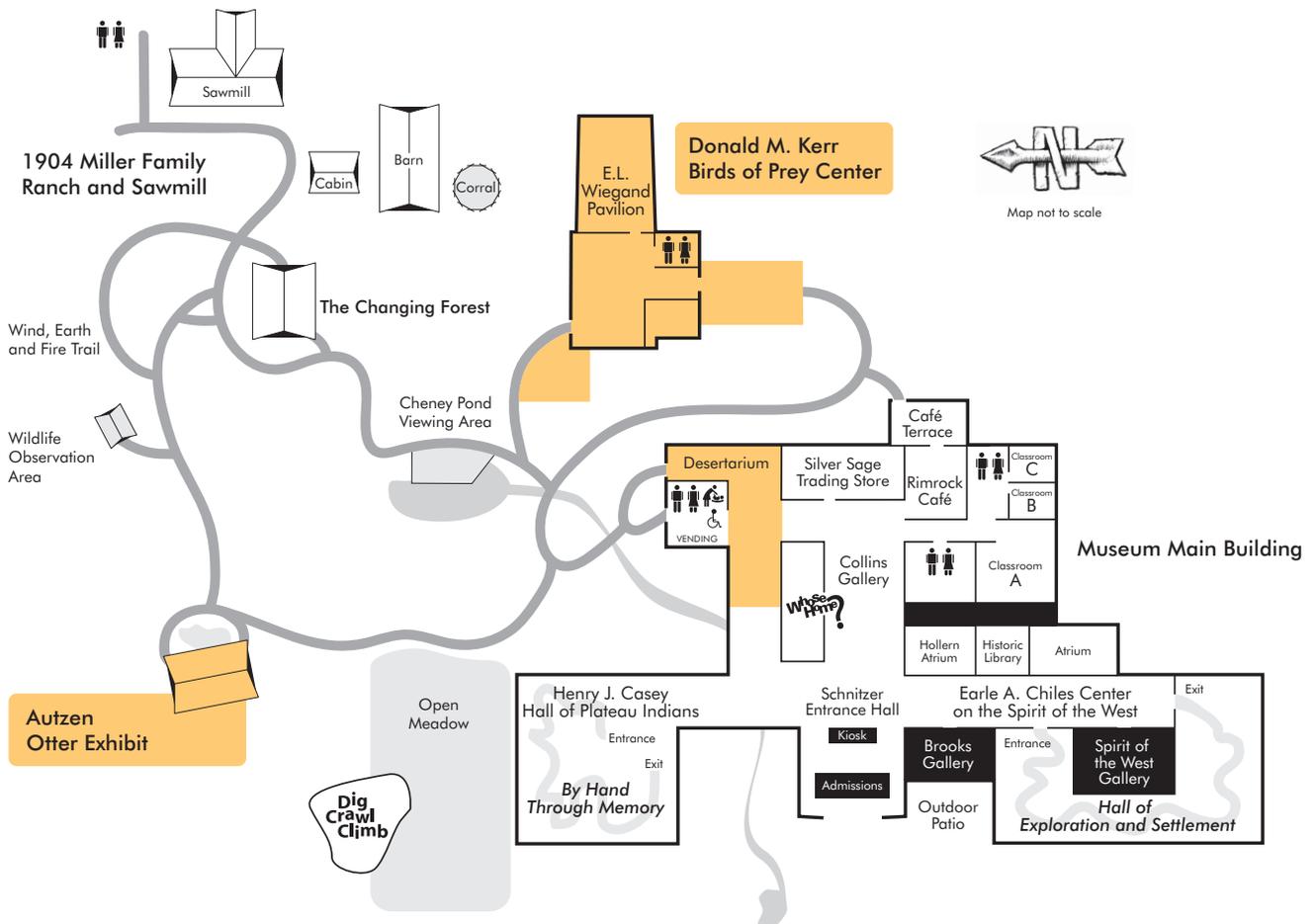
Name \_\_\_\_\_

**GRADE LEVEL: 2–3**  
**STUDENT GUIDE**

# LIFE SCIENCE | Survival Adaptations

On this expedition, you will visit the following areas in order to complete activities related to the theme “Survival Adaptations.”

EXHIBIT TITLE	Check (✓) when complete
Desertarium.....	<input type="checkbox"/>
Donald M. Kerr Birds of Prey Center.....	<input type="checkbox"/>
Autzen Otter Exhibit.....	<input type="checkbox"/>
Scavenger Hunt throughout the Museum.....	<input type="checkbox"/>



**Connection to Standards**  
**Next Generation Science Standards**  
 Disciplinary Core Ideas  
 • LS3.B: Variation of Traits  
 • LS4.D: Biodiversity and Humans

## DESERTARIUM | Survival in the High Desert

### REPTILES VERSUS AMPHIBIANS



- Reptiles are cold-blooded animals that have scales and breathe with lungs. Most reptiles live on land and lay eggs.
- Amphibians live on both land and water, using both gills and lungs throughout their lives. They do not have scales and their skin is smooth. Most amphibians go through metamorphosis.



**Can you find three different reptiles?**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**Can you find two amphibians?**

1. \_\_\_\_\_
2. \_\_\_\_\_

### WATER HABITAT

Find two animals that live in water.

1. \_\_\_\_\_
2. \_\_\_\_\_

- An adaptation is a body part or behavior that helps an animal survive in its environment.

What adaptation helps animals move in water?

How does that feature help the animal move?

What adaptation, or body part, helps animals breathe underwater?

How does that feature help the animal breathe?

## DESERTARIUM & OUTDOOR EXHIBITS

### BUILT FOR SURVIVAL

Organisms vary in how they look and function because they have inherited traits, which are specific for certain environments, from their parents. As you visit the animal exhibits throughout the Museum, look for animals that have the characteristics in the chart below.

Fill in the name of the animals you find with these characteristics:

#### WINGS

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

#### SCALES

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

#### FUR

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

### WORD BANK

camouflage

fly

desert tortoise

protect

dig

### STRUCTURE TO FUNCTION

Fill in the blanks and finish the following sentences:

1. A burrowing owl's wings can help it \_\_\_\_\_.
2. A \_\_\_\_\_ can use its claws to \_\_\_\_\_.
3. A bobcat has spotted fur to help \_\_\_\_\_ itself and protect it from being seen by a predator.
4. A collared lizard's scales can help \_\_\_\_\_ its body in a dry and rocky habitat.

## DONALD M. KERR BIRDS OF PREY CENTER

### RAPTOR ADAPTATIONS

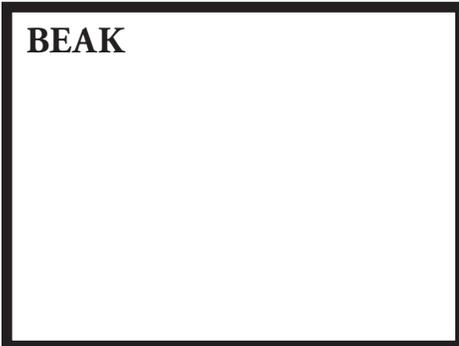
Explore the birds on display in this exhibit and read the exhibit panels.

1. Choose one bird.

Species name?

2. Draw the bird's...

**BEAK**



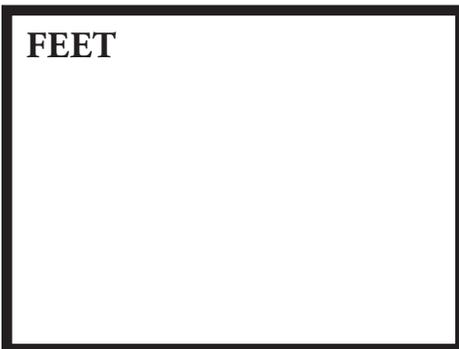
3. How does this beak help the bird eat?

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**FEET**



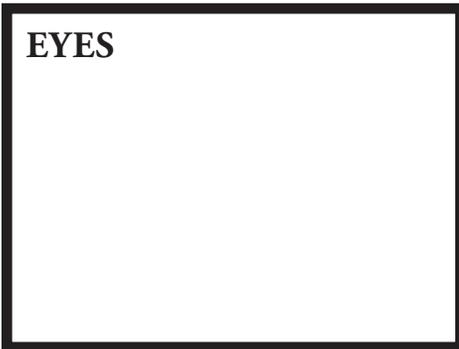
4. How do these feet help the bird catch prey?

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**EYES**



5. How do these eyes help the bird hunt?

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## DESERTARIUM

### AMAZING ADAPTATIONS

All animals have structures, or body parts, that serve specific functions. For example, the structure of raptor feet allows these birds to pick up and grasp prey.

Find the Western diamondback rattlesnake in the Desertarium and answer the following questions.



Rattlesnakes have brownish skin with dark brown diamond patterns on their backs.

1. How does this pattern and coloration help rattlesnakes survive in the High Desert?

Rattlesnakes have a rattle at the end of their tails, hence their name.

2. What is the rattle used for?

Rattlesnakes have long fangs in their mouths.

3. What is the function of these fangs?

#### **Discuss**

To the untrained eye, rattlesnakes and gopher snakes look similar. Look closely at the two types of snakes and discuss how they are similar and different. *Hint: Text on the exhibit panels may help you think about certain features and behaviors between the two species.*

## ENTIRE MUSEUM

### ADAPTATIONS EVERYWHERE

#### IDENTIFY AND FIND

Animals that live in the High Desert have many different ways of surviving. As you explore the Museum, look for the animals being described.

UNIQUE ADAPTATION	WHAT AM I?	I FOUND IT! (✓)
1. If I feel threatened, I hide my face and raise my quills to warn predators to keep away.		
2. With my webbed feet, long tail and waterproof fur, I'm a perfect underwater predator.		
3. I live on high, remote cliffs so that I can see for many miles and no predators can reach my nest.		
4. My camouflaged body and feathers that look like tree branches help me blend into a mixed conifer forest.		
5. To get away from predators, I run upright on my hind legs like a little <i>Tyrannosaurus rex</i> .		
6. My rough, scaly skin helps protect me from drying out in the desert heat.		
7. My strong, horny beak chomps through vegetation and my elephantlike legs with claws allow me to dig!		
8. I have a sucker-shaped mouth that "vacuums" up aquatic insects and plants off the bottom of the river.		