ARIZONA-SONORA DESERT MUSEUM

EXPLORER'S GUIDE

FOR A SELF-GUIDED VISIT

STUDENT HANDOUT

Welcome to the Arizona-Sonora Desert Museum!

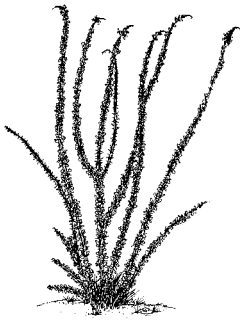
Instructions: Review the questions in this guide **before** you visit the Desert Museum. You should be able to find all the answers as you tour the Desert Museum if you carefully **observe** animals, plants, and geologic features both inside and outside exhibits, and **read** signs and labels. Docent interpreters are available near many exhibits. They are wearing uniforms and may be available to answer questions about exhibits. ***Good luck and enjoy your visit!***

PART I: GENERAL QUESTIONS

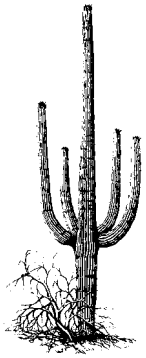
DESERT PLANTS

As you tour the Museum look for these desert plants. Examine each and decide which adaptations, listed below, the plants use to survive in a desert environment. Write the corresponding letters in the spaces provided near each plant.

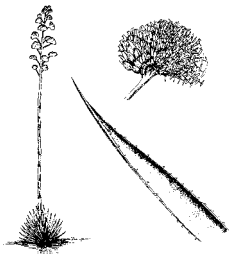
CREOSOTE _____



OCOTILLO _____



SAGUARO _____



AGAVE _____

PALO VERDE TREE _____

Adaptations:

A. Small leaves lose less water than large leaves.
B. Waxy leaves or stems help the plant seal in moisture.
C. Leaves fall off when water is scarce and grow back when water is plentiful.
D. Food for the plant can be made through green stems.
E. Spines help shade the plant from the sun's rays and protect it from hungry animals.

F. Thick, juicy stems or leaves used for water storage (succulence)

AWESOME DESERT ANIMALS

Whether a reptile, bird, mammal, arthropod or fish, survival is rule number one! All animals including humans have certain body modifications and behaviors that help them to survive in a competitive world. As you walk through the Museum choose one arthropod, reptile, amphibian, mammal and bird and try to figure out 2 adaptations that allow the animal to survive in the wild. Watch the animal for several minutes and describe its behavior.

NAME	ADAPTATION	OBSERVED BEHAVIOR
ARTHROPOD **Name:**	**1)** **2)**	
REPTILE **Name:**	**1)** **2)**	
AMPHIBIAN **Name:**	**1)** **2)**	
MAMMAL **Name:**	**1)** **2)**	
BIRD **Name:**	**1)** **2)**	

DOCENT INTERPRETATION

Be sure to listen to a docent interpretation. Docents are found throughout the Museum and have interesting desert artifacts, and sometimes live animals to show you! With your chaperone, check the events schedule at the Orientation Ramada and decide which interpretations you want to see. Write down the time and location so you don't forget!

_____

Use the space below to take some notes. When you return to your classroom, write a paragraph about what you learned.

Docent interpretation subject: _____

Notes:_____

_____

_____

_____

_____

_____

FAVORITE EXHIBITS

1) Which exhibit or part of the Museum did you enjoy the most? _____

_____

2) Why did you find this so interesting? _____

_____

_____

PART II: EXHIBIT SPECIFIC QUESTIONS

ORIENTATION RAMADA

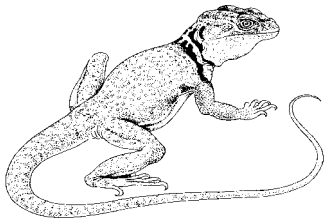
1) How many seasons are in the Sonoran Desert? ____ List them.

2) How many square miles does the Sonoran Desert cover?

3) In which 2 countries is the Sonoran Desert found?

REPTILES AND INVERTEBRATES

Herpetology staff (people who care for, and study reptiles and amphibians) have tried to create an exhibit that looks similar to the habitat that reptiles inhabit in the wild.



1) Find the San Esteban chuckwalla. Describe 2 features that help it blend in with its environment.

2) Find the speckled rattlesnake. Is it easy to locate in its exhibit? _____Describe 2 features that help it blend in with its environment.

3) Believe it or not, the only 2 venomous lizards in the world are found in the Sonoran Desert! Find the 2 lizards and write their names.

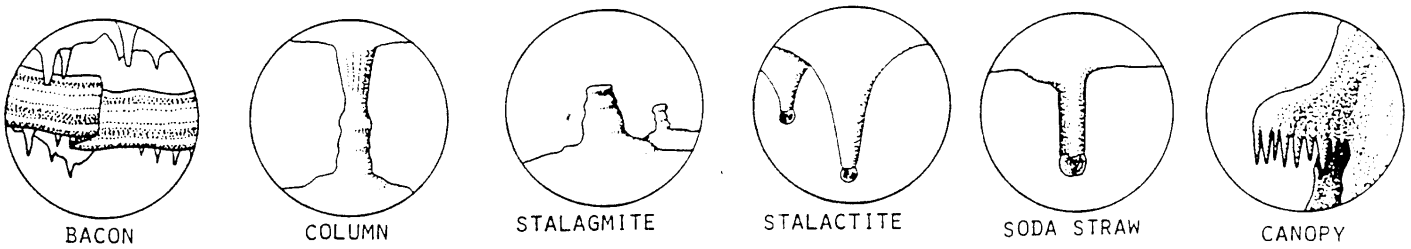
4) Although most reptiles are egg layers there are exceptions. Name a snake that gives birth to live young.

EARTH SCIENCES CAVE

Wet Cave

1) How is a limestone cave formed? (Hint: think wet)

2) How many different kinds of cave decorations can you find? Put a check through those that you see.



Dry Cave

1) Locate the *Fossilforous Limestone* display. How is it possible that we have fossilized seashells and limestone caves in the Sonoran Desert?

2) Locate the Hohokam site. Who were the Hohokam?

3) In what way do you think this site was used by the Hohokam?

4) List 4 animals that may make their homes in wet and dry caves.

Mineral Gallery

1) Find a mineral that matches shades of the rainbow:

Red_____ Orange_____ Yellow_____

Green_____ Blue_____ Violet_____

MOUNTAIN WOODLAND

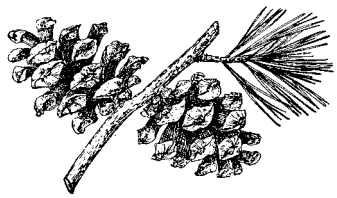


Fig. 8

Mountain Lion

1a) What are the mountain lions doing?

b) Would the mountain lions be doing this in nature? Explain.

2a) The mountain lion is a predator. What is a predator?

b) What adaptations does it have to be a successful predator?

3) Name 3 animals that a mountain lion would prey upon.

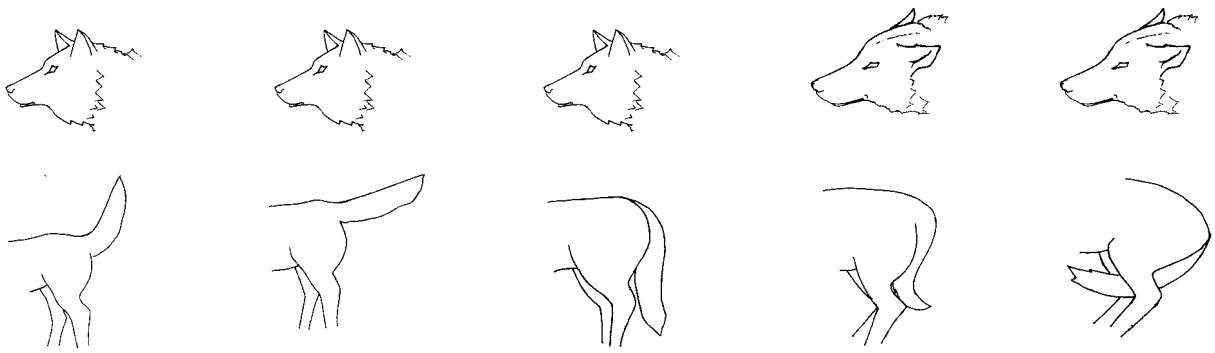
Mexican Gray Wolf

Wolves have ranks in their society just like humans. The animal with the highest position in the pack is the dominant animal. All members of the pack below the dominant female and male are submissive to them. The lowest ranking member of the pack is the most submissive.

1) Spend a few minutes observing the wolves. Pay special attention to the tails and ears. Match the body language of the wolves to those in the illustrations.

Circle each illustration you see displayed by the wolves.

Dominance *Aggression* *Relaxed* *Submission* *Fear*



DESERT GRASSLAND

1) Grasses can survive fire, freezing temperatures, drought, wind, heat, grazing and trampling. How are they able to do this?

2) Find and name the Endangered grassland rattlesnake.

3a) Prairie dogs used to be found in very large "towns". What is an advantage to living in a large group?

b) What is a disadvantage to living in a large group?

4) What are the prairie dogs doing? Check off the behaviors that you observe.

□ Eating □ Sunning □ Playing □ Grooming

□ Predator alert Other:_____

Mammoth Kill Site

1a) Feel the teeth of the mammoth (oval shapes below sign). Describe the texture.

b) What do you suppose mammoths ate?

c) How did these teeth assist the animal in eating? HINT: Think about your own molar for comparison.

DESERT LOOP TRAIL

Javelina

1a) Stop at the flip-up signs along the trail by the javelina exhibit and try to answer the questions. How many did you get correct? _____

b) Name an interesting fact that you learned.

2) Why do you think people often mistake javelinas for pigs?

3) List 4 differences between javelina and pigs.

Javelinas	***Pigs***
a)	a)
b)	b)
c)	c)
d)	d)

4) Scan the habitat for javelinas. What are they doing? Why do you think they are doing this?

Agave

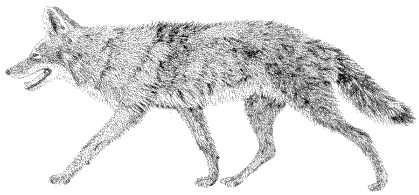
1) Find the Hohokam agave fields. How does the Hohokam method of agave farming differ with commercial farming of today?

Coyotes

1) List 3 adaptations that allow the coyote to be a successful predator.
   a)

   b)

   c)



2) Coyotes are able to thrive in many different habitats. Why?

RIPARIAN CORRIDOR

1) What is a "riparian area"?

2) If you were flying in an airplane, how would you recognize a riparian area?

3) List 3 ways riparian areas are different than the surrounding desert.

Beaver/Otter Exhibit

1) Observe the beaver and otter. List 3 adaptations each of them has for swimming:

Beaver	**River Otter**
a)	a)
b)	b)
c)	c)

2) Why are fish found in the beaver exhibit but not the otter exhibit?

3a) Find and list 3 species of fish native to the Sonoran Desert Region.

b) Why do you think these fish are now Threatened and Endangered species?

Coati Exhibit

Male coatis are solitary except for mating. The females and young live together in bands of 4 – 20.

1) Spend a few minutes watching the behaviors of the coatis. Create a map of the exhibit and label the coatis on the map. Use the key below to indicate the behaviors you see.

D = digging **E** = eating **R** = resting **S** = sniffing **G** = grooming **P** =playing **C** = climbing

2) Coatis are very interesting looking animals. Observe their body and list 3 adaptations that they have for hunting and feeding.

3) How do coatis obtain food?

4) What do they eat?

POLLINATION GARDENS

1) Make a stop in the pollination garden. Circle the different types of pollinators that you see:

Bee Moth Fly Wasp Butterfly Hummingbird

Others:_____

2) Observe 2 pollinators for five minutes and describe their movement and behavior.

Pollinator's name:
Description:

Pollinator's name:
Description: