

# WELCOME!



On behalf of Splash! Publications, we would like to welcome you to *Large Mammals* one of nine lessons in our *Texas Animals Unit*. This lesson was designed by teachers with you and your students in mind.

## THE FORMAT

Our goal is a lesson that you can use immediately. No comprehension questions to write, activities to create, or vocabulary words to define. Simply make copies of the lesson for your students and start teaching.

## THE VOCABULARY

Our lessons feature words in bold type. We have included a Glossary to help students pronounce and define the words. Unlike a dictionary, the definitions in the Glossary are concise and written in context. Remember, we're teachers! Students will be exposed to these vocabulary words in the comprehension activities. They will also be tested on the vocabulary words at the end of the lesson.

Students will be responsible for filling out and studying their vocabulary cards. You may want to have students bring in a small box for storing their vocabulary cards. We don't have to tell you that incorporating these words into your Reading and Spelling programs will save time and make the words more meaningful for students.

## THE LESSON PLAN

Before reading *Large Mammals*, students will:

- complete Vocabulary Cards for *captivity*, *coast*, *digest*, *dorsal*, *illegal*, *inactive*, *native*, *North America*, *preserve*, *yucca*. (TEKS: READING 6C)

After reading *Large Mammals*, (TEKS: SCIENCE 10A; READING 8B) students will:

- answer *Large Mammals Reading Comprehension Questions*. (TEKS: SCIENCE 10A; READING 6C, 10 H, 10J, 10K)
- use a graphic organizer to research and complete *Mammal Expert's Journal Part I*. (TEKS: SOCIAL STUDIES SKILLS 22C, 23D, 23E; SCIENCE 10A; READING 6C, 8B, 10L; WRITING 16A, 16B, 17C, 17D)
- take a *Vocabulary Quiz for Large Mammals*. (TEKS: SOCIAL STUDIES SKILLS 23A; READING 6C)

**NOTE:** The answers to all activities and quizzes are at the end of the lesson.

## OTHER LESSONS IN OUR TEXAS ANIMALS UNIT

*The Animal Kingdom*, *Vertebrates*, *Invertebrates*, *Texas's Small Mammals*, *Texas's Birds*, *Texas's Fish and Reptiles*, *Texas's Amphibians*, *Texas's Arthropods*.

# VOCABULARY CARD



word: \_\_\_\_\_

definition: \_\_\_\_\_

\_\_\_\_\_



# VOCABULARY CARD



word: \_\_\_\_\_

definition: \_\_\_\_\_

\_\_\_\_\_



# VOCABULARY CARD



word: \_\_\_\_\_

definition: \_\_\_\_\_

\_\_\_\_\_





# LARGE MAMMALS



Texas is full of wildlife. Nearly 150 species of mammals roam through Texas's four major land regions or live in the Gulf of Mexico. Many of the land and sea mammals **native** to Texas are rare or extinct, which means they are no longer living.

Texas has many species of large land and sea mammals. Some of the most popular large mammals include black bears, pronghorns, mountain lions, elk, bighorn sheep, mule deer, bottlenose dolphins, short-finned pilot whales, and sperm whales. As you read about Texas's large mammals, pay special attention to what they eat and their structural and behavioral adaptations.

## BLACK BEARS

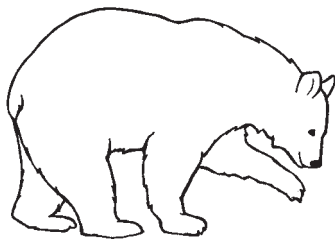
Black bears are some of the largest mammals in **North America**. They used to roam throughout the state of Texas, but today they can mostly be found in the mountains of the Trans-Pecos region.

Like other mammals, black bears are covered with a layer of thick fur to keep them warm. The fur color of black bears can actually be black, tan, brown, or yellow. Beginning in late summer and fall, black bears search for acorns and other high protein foods. They build fat layers for added warmth.

During the colder months, black bears find a quiet place at the base of a tree or under the ledge of a large rock and remain **inactive**

for part of the winter. Building fat layers and resting during the winter are behavioral adaptations that help black bears survive when food is difficult to find.

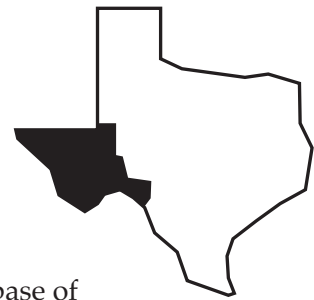
Female black bears give birth to one or two cubs every other year. Black bear cubs are blind at birth and only weigh about eight ounces. They stay with their mothers for about a year. Black bears grow very quickly. Full grown females can weigh as much as 600 pounds. Males can weigh up to 1,200 pounds!



**BLACK BEAR**

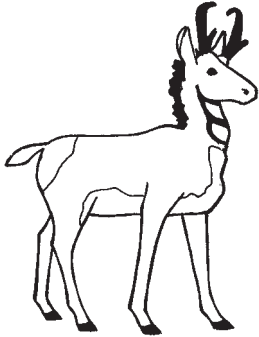
Black bears are omnivores, which means they eat plants and meat. Their favorite foods are green plants, insects, and fruit. When food is hard to find, bears will eat small animals, young deer, and even garbage.

Black bears have sharp claws that make them good tree climbers and strong legs for running. They can reach speeds of up to 25 miles per hour. Humans are the only enemies of black bears, so don't try to feed or approach them.



## PRONGHORNS

Pronghorns are some of the fastest animals in the world. They can run up to 50 miles per hour. This speed helps pronghorns run from predators that include mountain lions, wolves, and bobcats. When in danger, pronghorns act quickly by flaring out the white hairs on their back sides to warn other members of their herd. They have amazing eyesight and can sense movement up to three miles away. Their eyes are located far back on their heads so they can keep watch even when they are eating with their heads down.



PRONGHORN

Pronghorns are white and tan in color. They weigh up to 125 pounds and stand about three feet high. The name “pronghorn” comes from the shape of the horns found on both males and females. Most people mistakenly call pronghorns “antelopes.” Pronghorns are not true antelopes because they shed their horns every year. True antelopes do not shed their horns.

Female pronghorns usually have twins at the end of winter. Baby pronghorns, or fawns, weigh between five and seven pounds at birth. They can walk in less than an hour and outrun a human being at just four days old. Fawns give off almost no odor. This structural adaptation helps protect them from coyotes and golden eagles, their biggest enemies.

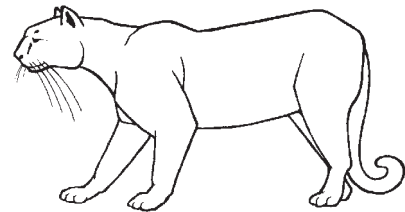
Pronghorns can survive in very hot and very cold temperatures. They are herbivores, which means they only eat plants. They eat shrubs, grasses, and even cacti. In Texas, pronghorns were once common over the western two-thirds of the state. Today, the largest numbers are found in the Trans-Pecos region. Pronghorns are protected by strict laws. Only a few hunting permits are issued each year by the Texas Parks and Wildlife Division.

## MOUNTAIN LIONS

Mountain lions are the largest wildcats in the United States. They are also known as cougars, pumas, and panthers. Their rounded black-tipped ears and wide noses give mountain lions an excellent sense of hearing and smell. Long legs and unusually large paws make them good climbers and jumpers. Mountain lions use their long black-tipped tails to balance themselves as they jump and walk along steep ledges.

Female mountain lions usually give birth to two or three cubs. The cubs are blind at birth and unable to defend themselves. Mountain lions have brownish-orange coats, grow to seven or eight feet long, and weigh 150 to 300 pounds. They roam throughout the Trans-Pecos region, especially in Big Bend National Park. They can also be found in the brushlands of south Texas and parts of the Hill Country in central Texas.

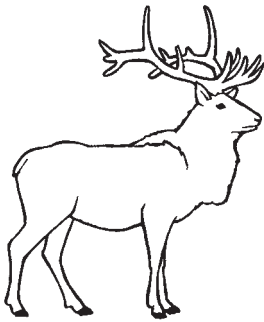
Mountain lions are shy animals. They are carnivores, which means they eat meat. Mountain lions are most active at night, hunting for deer, porcupines, and rabbits.



MOUNTAIN LION

## ELK

Elk are large, deer-like herbivores. They have long necks for stretching and reaching plants in difficult places. Strong teeth help them bite and chew plants. Elk have special four-part stomachs so they can **digest** grasses, shrubs, tree limbs, and even bark.



ELK

Elk have large bodies and huge horns. Male elk have large, six-pointed antlers that grow from the bony bumps on their heads. Their antlers are light and easily damaged until late summer when they turn into bone. Antlers grow for another six or seven months before falling off in early spring. A set of antlers can grow four feet long and weigh up to 40 pounds. Antlers act as a cooling system during the summer. Warm blood flowing through the antlers is cooled by the outside air. Antlers also help protect males when they fight with other elk.

Both male and female elk have body colors that can range from light tan to dark brown. Their thick fur protects them from cold temperatures. Female elk usually give birth to one calf each spring. Calves weigh about 35 pounds and can gain up to two pounds a day during their first few weeks of life.

Elk are social animals. They live in herds that are led by female elk. Female elk lead the rest of the herd to water and feeding grounds. During the spring, elk travel to higher places where they find cooler temperatures and plenty of food. In Texas, elk were once found only in the Guadalupe Mountains. Today, five small herds of wild elk roam through the Guadalupe, Wylie, Davis, and Eagle mountains in West Texas.

## BIGHORN SHEEP

Bighorn sheep, or mountain sheep, live in the protected areas of the Trans-Pecos region. They have extremely good eyesight, very short tails, and pointed ears. The horns of male bighorn sheep are larger and curlier than the horns of female bighorn sheep. Male bighorn sheep are known as rams. Female bighorn sheep are ewes.

Ewes deliver one or two lambs each spring. Bighorn sheep have a special kind of “nursery system.” Two ewes stay with all of the lambs in a protected area while the other ewes move into the open areas to find food.

Unlike most other types of sheep, bighorns are covered with an outer layer of brown hair instead of wool. The underparts of bighorn sheep are gray. Their tails, backs of their legs, and areas around their jaws and noses are white. These colors help bighorn sheep blend in with the steep rocky slopes where they rest at night. Their eyes are located on the sides of their heads, allowing bighorn sheep to see predators approaching from all directions. Bighorn sheep have sharp-edged hooves that are split down the middle. These hooves help them climb and escape from predators that are unable to move as quickly through the rocky areas where bighorn sheep hide.

Bighorn sheep are herbivores. Their diets include **yucca**, prickly pear cactus, green leafy plants, and wild onions. Since water is difficult to find in the desert, bighorn sheep are able to get most of the water they need from the foods they eat.



BIGHORN SHEEP

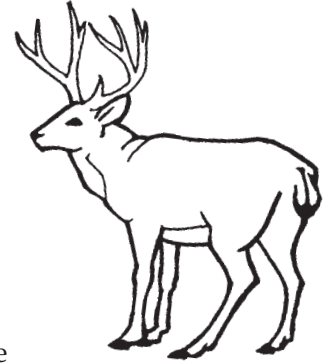
## MULE DEER

Texas has a large number of mule deer. Mule deer can usually be spotted on the edges of forests where they hide themselves in leaves and tall grasses. Mule deer can be identified by the way they jump and bounce while running. They can reach speeds of 45 miles per hour. When frightened, mule deer move in a series of stiff-legged jumps, with all four feet hitting the ground at the same time. This behavior alerts other mule deer to danger in the area.

Mule deer have wide antlers, long ears, and black tips on their tails. During the summer, their coats can be yellow or reddish brown. In the winter, their coats turn gray. Their throats, inside ears, and inside legs are white. These colors are structural adaptations that help hide mule deer in the desert from predators like mountain lions, bobcats, and coyotes.

Bucks, or male mule deer, are larger than females. Female mule deer, known as does, deliver their babies in late spring or early summer. Does usually give birth to one fawn the first year and twins the next year. At birth, the fawns weigh about six pounds and are reddish colored with white spots. The white spots help camouflage fawns from eagles that like to swoop down and grab them.

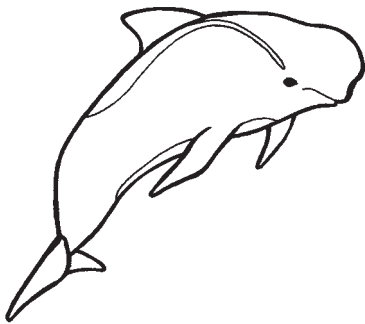
Mule deer have good senses of sight, smell, and hearing. Their large feet help them dig for water that can be as deep as two feet underground. Mule deer are herbivores that eat mostly leaves and shrubs. They eat so carefully, mule deer can even pick the fruit off of prickly cactus.



MULE DEER

## SHORT-FINNED PILOT WHALES

Short-finned pilot whales are members of the dolphin family. They are second in size only to killer whales. Pilot whales are found all over the world. Many have been spotted in the warm waters along the Texas **coast** in the Gulf of Mexico.



SHORT-FINNED PILOT WHALE

Short-finned pilot whales do well in **captivity** and are very smart. One captive pilot whale was trained by Navy scientists to fetch objects from the ocean floor at depths of over 1,600 feet. Short-finned pilot whales are usually black or coal gray in color, measure up to 20 feet in length, and weigh as much as three tons. That's a lot of whale!

Pilot whales are carnivores that feed mostly on squid and fish. They eat as much as 40 pounds of fish each day.

Unlike other dolphins in their family, short-finned pilot whales have very few teeth. This structural adaptation allows them to easily swallow many squid at one time. They are very social and usually travel in groups of 10 to 50 whales. Pilot whales use squealing, whistling, and groaning sounds to communicate with one another and to locate food.

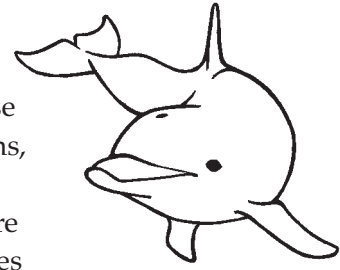
Female short-finned pilot whales give birth to one calf every five to eight years. Calves weigh about 220 pounds at birth and depend upon their mother's milk for at least two years. Living to 60 years of age is not unusual for female pilot whales. Fishing gear and nets used by commercial fishermen are the biggest enemies of short-finned pilot whales.

## BOTTLENOSE DOLPHINS

Bottlenose dolphins are strong mammals with short beaks and **dorsal** fins that stick out of the water. Dorsal fins are structural adaptations that help bottlenose dolphins steer and balance in the water.

Bottlenose dolphins have pale gray sides, white bellies, and purplish-gray upperparts. Adults can grow to about ten feet. These dolphins live alone or in small groups called pods. Like all dolphins, bottlenose dolphins can hold their breath to dive below the surface of the water. They open their blowholes and blow out air just before reaching the surface of the water. Bottlenose dolphins are carnivores that eat a wide variety of fish, including tarpon, sailfish, sharks, and catfish. Using 120 teeth, they eat between 36 and 72 pounds of food each day.

Like pilot whales, bottlenose dolphins use groans, whistles, and barks to find food. These sound waves bounce off their prey and allow other dolphins in their pods to locate the fish. All dolphins, including bottlenose dolphins, are protected by strict laws. It is **illegal** to hunt bottlenose dolphins.



BOTTLENOSE DOLPHIN

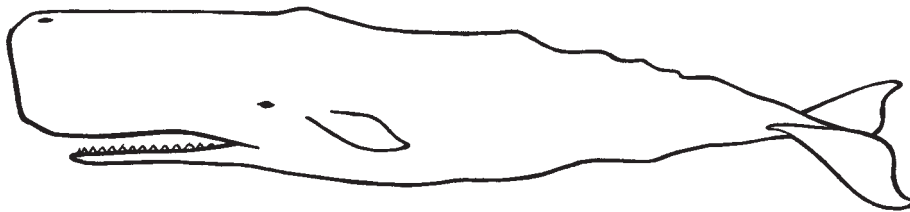
## SPERM WHALES

Sperm whales are found in all of the world's oceans. They are the most numerous of the great whales in the Gulf of Mexico. It's very common to see sperm whales near the Texas coast. Sperm whales are large, blackish-brown whales with huge heads and short snouts. Their heads can be one third the lengths of their bodies. They have 20-26 pairs of cone-shaped teeth in their lower jaws. Sperm whales can weigh up to 40 tons. This makes them the largest toothed animals in the world. Their throats are large enough to swallow a human being.

Sperm whales are great divers and hunters. They are carnivores that regularly dive to depths of 6,000 feet to feast on squid, octopus, lobster, crab, and jellyfish. A single sperm whale eats more than a ton of squid and fish every day. Sperm whales experience extreme pressure when they dive. To help them survive under water for so long, their rib cages are flexible and their hearts can slow down to **preserve** their supply of oxygen.

Female sperm whales give birth to one calf every four to six years. Within ten seconds of birth, newborn sperm whales swim to the surface of the water for their first breath. Baby sperm whales are 13 feet long and weigh about a ton. They depend on their mother's milk for their first two or three years of life.

Sperm whales communicate with other whales by whistling, squeaking, and groaning. They also click several times when they meet other whales. Sperm whales usually travel very slowly, but can swim 20 miles per hour when disturbed or frightened. Both of these behavioral adaptations protect sperm whales from predators that include killer whales and large sharks.



SPERM WHALE



# LARGE MAMMALS



Directions: Read each question carefully. Darken the circle for the correct answer.

- 1 Many of the land and sea mammals native to Texas are rare or extinct. **Extinct** means –
- A moved to less populated areas  
 B roams through all areas of Texas  
 C covered with a thick layer of fur  
 D no longer living
- 2 After reading about black bears, you get the idea that –
- F they only eat meat  
 G their fur is always black in color  
 H they live mostly in the eastern half of Texas  
 J a newborn black bear cub could probably fit in your hand
- 3 Which of the following is a **behavioral adaptation** of pronghorns?
- A They have amazing eyesight.  
 B They have twins at the end of winter.  
 C When in danger, they flare out the white hairs on their back sides to warn others in the herd.  
 D Pronghorns weigh up to 125 pounds and stand about three feet high.
- 4 Bighorn sheep are different from other sheep because –
- F they lay eggs  
 G they are covered with hair instead of wool  
 H they don't have horns  
 J they eat meat instead of plants
- 5 Which of the following is the **best** example of **camouflage**?
- A White spots on mule deer fawns hide them from predators that want to swoop down and grab them.  
 B Short-finned pilot whales are very smart.  
 C Wide noses give mountain lions an excellent sense of smell.  
 D Black bears are covered with a thick layer of fur to keep them warm.
- 6 Which statement below describes a **structural adaptation**?
- F Pronghorns are herbivores that only eat plants.  
 G Bottlenose dolphins use groans, whistles, and barks to find food.  
 H Mountain lions use their tails to balance themselves.  
 J Sperm whales are found in all of the world's oceans.
- 7 Which statement about sperm whales is **false**?
- A It's very common to see sperm whales near the Texas coast.  
 B Sperm whales give birth every year.  
 C It is illegal to hunt sperm whales.  
 D Sperm whales have huge heads.

READING

## Answers

- |   |                 |   |                 |
|---|-----------------|---|-----------------|
| 1 | (A) (B) (C) (D) | 5 | (A) (B) (C) (D) |
| 2 | (F) (G) (H) (J) | 6 | (F) (G) (H) (J) |
| 3 | (A) (B) (C) (D) | 7 | (A) (B) (C) (D) |
| 4 | (F) (G) (H) (J) |   |                 |

# MAMMAL EXPERT'S JOURNAL: PART I

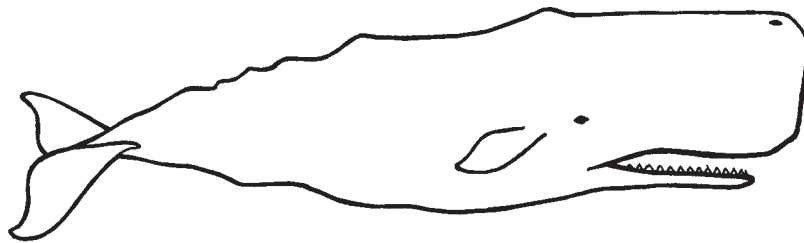
Texas is home to many species of large mammals. You have learned so much information about Texas's large mammals that you are ready to create the first part of a *Mammal Expert's Journal*. An *Expert's Journal* includes pictures and descriptions of each mammal that you have studied.

To complete Part I of your *Mammal Expert's Journal*, you will need:

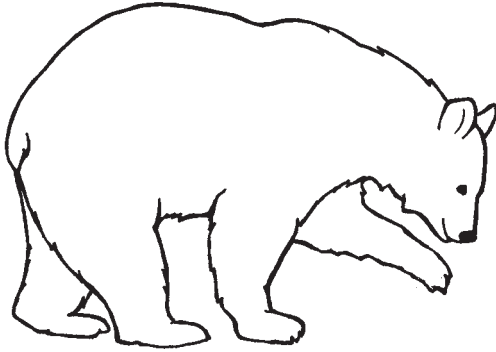
- your information about Texas's Large Mammals.
- pages with the pictures of large mammals already on them.
- coloring pencils.

## PART I DIRECTIONS:

1. Use the 9 mammal pages and your information about Texas's large mammals to correctly color each of the 9 large mammals.
2. Use your information about Texas's large mammals and the lines provided on each of the pages to fill in the required information about each large mammal. Spelling Counts!
3. When you are finished with all 9 large mammals, arrange the pages neatly on top of each other.
4. Put your finished pages in a folder or other safe place. You will need them later to complete Part II of your *Mammal Expert's Journal*.



# BLACK BEARS



Black bears are some of the largest mammals in North America.

They are omnivores that usually roam the mountains of our state. Omnivores are \_\_\_\_\_

\_\_\_\_\_

Favorite foods of black bears include \_\_\_\_\_

Black bear cubs only weigh about eight ounces at birth. Full grown females can weigh \_\_\_\_\_

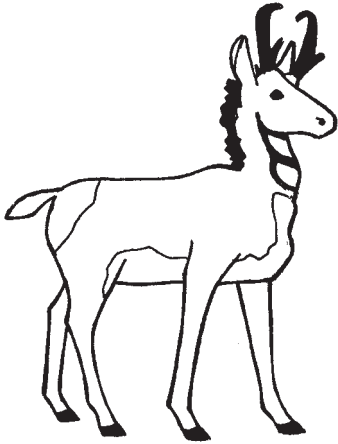
and full grown males can weigh \_\_\_\_\_

The fur colors of black bears can be \_\_\_\_\_

One structural adaptation of black bears is \_\_\_\_\_

One behavioral adaptation of black bears is \_\_\_\_\_

One other interesting fact I learned about black bears is \_\_\_\_\_



## PRONGHORNS

Pronghorns are some of the fastest animals in the world. They can run up to \_\_\_\_\_

Their speed helps them run from predators that include \_\_\_\_\_

Most people mistakenly call pronghorns \_\_\_\_\_

Pronghorns are not true \_\_\_\_\_ because \_\_\_\_\_

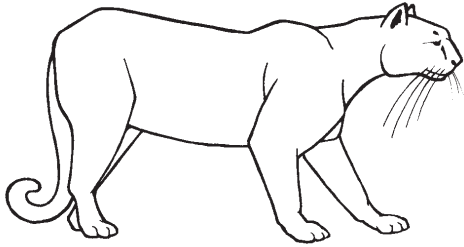
Pronghorns are herbivores. Herbivores are \_\_\_\_\_

One structural adaptation of pronghorns is \_\_\_\_\_

One behavioral adaptation of pronghorns is \_\_\_\_\_

One other interesting fact I learned about pronghorns is \_\_\_\_\_

# MOUNTAIN LIONS



Mountain lions are the largest wildcats in the United States. They are also known as

---

---

---

Mountain lions are carnivores. Carnivores are \_\_\_\_\_

---

Favorite foods of mountain lions include \_\_\_\_\_

---

Mountain lions are good climbers and jumpers because \_\_\_\_\_

---

Two structural adaptations of mountain lions are \_\_\_\_\_

---

---

---

---

One other interesting fact I learned about mountain lions is \_\_\_\_\_

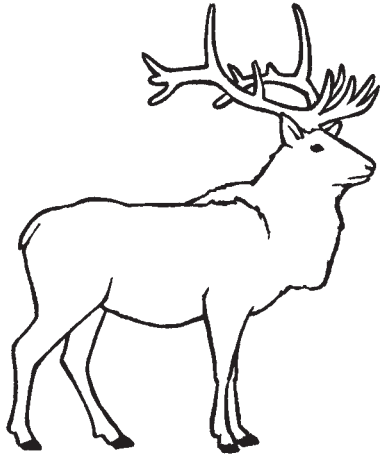
---

---

---

---

# ELK



Elk are large, deer-like herbivores. They have long necks for \_\_\_\_\_

Elk can be easily spotted by their \_\_\_\_\_

A set of male antlers can grow four feet long and weigh \_\_\_\_\_

Antlers act as \_\_\_\_\_

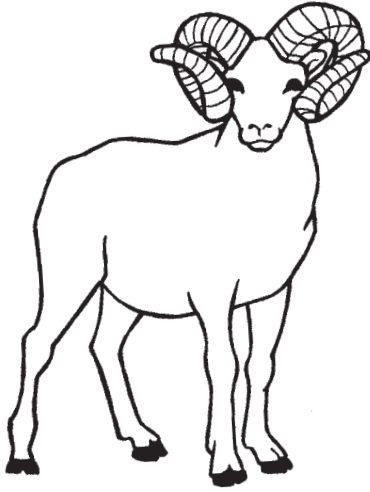
Antlers also help protect males when \_\_\_\_\_

Elk are social animals. They live in herds that are led by \_\_\_\_\_

Two structural adaptations of elk are \_\_\_\_\_

One other interesting fact I learned about elk is \_\_\_\_\_

# BIGHORN SHEEP



Bighorn sheep, or mountain sheep, live \_\_\_\_\_

---

---

Male bighorn sheep are known as \_\_\_\_\_

Female bighorn sheep are \_\_\_\_\_

Their babies are called \_\_\_\_\_

Unlike most other types of sheep, bighorns  
are covered with \_\_\_\_\_

The underparts of bighorn sheep are \_\_\_\_\_

and their tails, backs of their legs, jaws, and noses are \_\_\_\_\_

This coloring helps them \_\_\_\_\_

One structural adaptation of bighorn sheep is \_\_\_\_\_

---

---

---

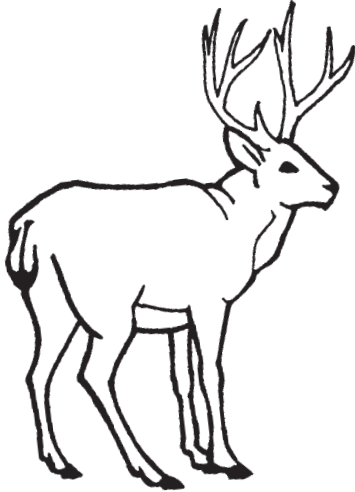
One other interesting fact I learned about bighorn sheep is \_\_\_\_\_

---

---

---

---



## MULE DEER

Mule deer can be easily spotted on the edges of forests where they hide themselves in

---

They can be identified by the way they

---

---

Male mule deer are known as \_\_\_\_\_

Female mule deer are known as \_\_\_\_\_

and their babies are called fawns. At birth, fawns weigh about six pounds and are reddish colored with \_\_\_\_\_

This coloring helps fawns by \_\_\_\_\_

---

One structural adaptation of mule deer is \_\_\_\_\_

---

---

One behavioral adaptation of mule deer is \_\_\_\_\_

---

---

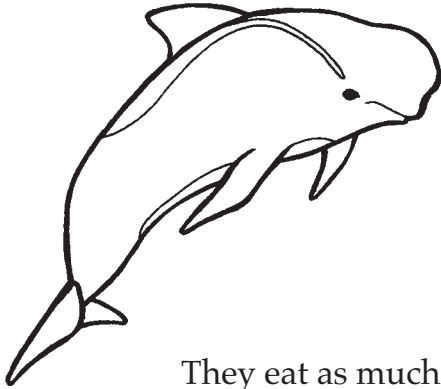
One other interesting fact I learned about mule deer is \_\_\_\_\_

---

---

---

# SHORT-FINNED PILOT WHALES



Short-finned pilot whales are members of the dolphin family. They are second in size only to \_\_\_\_\_

Pilot whales are carnivores that eat mostly \_\_\_\_\_

They eat as much as \_\_\_\_\_

Short-finned pilot whales do well in captivity and are very smart. One captive pilot whale was trained by Navy scientists to \_\_\_\_\_

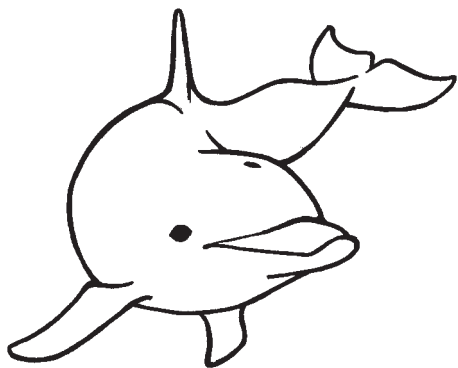
Female short-finned pilot whales give birth to one calf every \_\_\_\_\_

One structural adaptation of short-finned pilot whales is \_\_\_\_\_

One behavioral adaptation of short-finned pilot whales is \_\_\_\_\_

One other interesting fact I learned about short-finned pilot whales is \_\_\_\_\_

## BOTTLENOSE DOLPHINS



**B**ottlenose dolphins are strong mammals with short beaks and dorsal fins that stick out of the water. Dorsal fins are \_\_\_\_\_

Bottlenose dolphins are carnivores that eat a

wide variety of fish, including \_\_\_\_\_

Using 120 teeth, they eat between \_\_\_\_\_ pounds of food each day. Like all dolphins, bottlenose dolphins hold their breath to \_\_\_\_\_

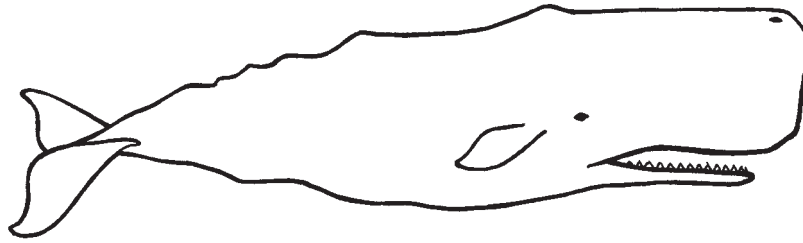
They open their blowholes and blow out air just before \_\_\_\_\_

One structural adaptation of bottlenose dolphins is \_\_\_\_\_

One behavioral adaptation of bottlenose dolphins is \_\_\_\_\_

One other interesting fact I learned about bottlenose dolphins is \_\_\_\_\_

# SPERM WHALES



Sperm whales are found in all of the world's oceans. Sperm whales are large, blackish-brown whales with \_\_\_\_\_

Their heads can be one third the length of \_\_\_\_\_

Sperm whales have 20-26 pairs of \_\_\_\_\_

and can weigh up to \_\_\_\_\_

Sperm whales are carnivores that feast on \_\_\_\_\_

A single sperm whale eats more than \_\_\_\_\_

One structural adaptation of sperm whales is \_\_\_\_\_

One behavioral adaptation of sperm whales is \_\_\_\_\_

One other interesting fact I learned about sperm whales is \_\_\_\_\_

# VOCABULARY QUIZ

## LARGE MAMMALS

**DIRECTIONS:** Match the vocabulary word on the left with its definition on the right. Put the letter for the definition on the blank next to the vocabulary word it matches. Use each word and definition only once.

1. \_\_\_\_\_ North America

2. \_\_\_\_\_ inactive

3. \_\_\_\_\_ yucca

4. \_\_\_\_\_ captivity

5. \_\_\_\_\_ illegal

6. \_\_\_\_\_ preserve

7. \_\_\_\_\_ coast

8. \_\_\_\_\_ dorsal

9. \_\_\_\_\_ digest

10. \_\_\_\_\_ native



A. a body part located on the back of an animal.

B. one of seven continents in the world. Bounded by Alaska on the northwest, Greenland on the northeast, Florida on the southeast, and Mexico on the southwest.

C. a plant with pointed leaves and clusters of white, waxy flowers.

D. keeping an animal in an enclosed area or cage.

E. surviving for a long time with no movement.

F. an area of land that borders water.

G. against the law.

H. belonging to a place because of birth.

I. to save something so it can be used later.

J. the process used by the body to break down food so it can be used for vitamins and energy.

# GLOSSARY



**cap•tiv•i•ty** keeping an animal in an enclosed area or cage.

**coast** an area of land that borders water.

**di•gest** the process used by the body to break down food so it can be used for vitamins and energy.

**dor•sal** a body part located on the back of an animal.

**il•le•gal** against the law.

**in•ac•tive** surviving for a long time with no movement.

**na•tive** belonging to a place because of birth.

**North A•mer•i•ca** one of seven continents in the world. Bounded by Alaska on the northwest, Greenland on the northeast, Florida on the southeast, and Mexico on the southwest.

**pre•serve** to save something so it can be used later.

**yuc•ca** a plant with pointed leaves and clusters of white, waxy flowers.

# ANSWERS



## ANSWERS TO COMPREHENSION QUESTIONS

1. D
2. J
3. C
4. G
5. A
6. H
7. B

## ANSWERS TO VOCABULARY QUIZ

- |      |       |
|------|-------|
| 1. B | 6. I  |
| 2. E | 7. F  |
| 3. C | 8. A  |
| 4. D | 9. J  |
| 5. G | 10. H |

## ANSWERS TO MAMMAL EXPERT'S JOURNAL PART I

### BLACK BEARS

Black Bears are some of the largest mammals in North America. They are omnivores that usually roam the mountains of our state. Omnivores are animals that eat both meat and plants. Favorite foods of black bears include green plants, insects, and fruit. Black bear cubs only weigh about eight ounces at birth. Full grown females can weigh 600 pounds and full grown males can weigh 1,200 pounds. The fur colors of black bears can be black, tan, brown, or yellow. One structural adaptation of black bears is they are covered with a layer of thick fur to keep them warm or black bears have sharp claws that make them good tree climbers and strong legs for running. One behavioral adaptation of black bears is beginning in late summer they start building fat layers for added warmth or they remain inactive for part of the winter.

### PRONGHORNS

Pronghorns are some of the fastest animals in the world. They can run up to 50 miles per hour. Their speed helps them run from predators that include mountain lions, wolves, and bobcats. Most people mistakenly call pronghorns antelopes. Pronghorns are not true antelopes because pronghorns shed their horns every year. Pronghorns are herbivores. Herbivores are animals that only eat plants. One structural adaptation of pronghorns is they have amazing eyesight and can sense movement up to three miles away or their eyes are located far back on their heads so they can keep watch even when they are eating with their heads down or fawns give off no odor, protecting them from coyotes and golden eagles. One behavioral adaptation of pronghorns is when in danger, pronghorns act quickly by flaring out the white hairs on their back sides to warn other members of their herd.

### MOUNTAIN LIONS

Mountain lions are the largest wildcats in the United States. They are also known as cougars, pumas, or panthers. Mountain lions are carnivores. Carnivores are animals that only eat meat. Favorite foods of mountain lions include deer, porcupines, and rabbits. Mountain lions are good climbers and jumpers because they have long legs and unusually large paws. Two structural adaptations of mountain lions are they have rounded black-tipped ears for hearing or they have wide noses for an excellent sense of smell or their long black-tipped tails help them to balance themselves as they jump and walk along steep ledges.

### ELK

Elk are deer-like herbivores. They have long necks for stretching and reaching plants in difficult places. Elk can be easily spotted by their large bodies and huge horns. A set of male antlers can grow four feet long and weigh up to 40 pounds. Antlers act as a cooling system during the summer. Antlers also help protect males when they fight with other elk. Elk are social animals. They live in herds that are led by female elk. Two structural adaptations of elk are they have strong teeth that help them bite and chew plants or they have special four-part stomachs that help them digest grasses, shrubs, tree limbs, and even bark or they have antlers for protection or they have thick fur to protect them from cold temperatures.

## ANSWERS TO MAMMAL EXPERT'S JOURNAL PART I (CONTINUED)

### BIGHORN SHEEP

Bighorn sheep, or mountain sheep, live in the protected areas of the Trans-Pecos region. Male bighorn sheep are known as rams. Female bighorn sheep are ewes. Their babies are called lambs. Unlike most other types of sheep, bighorns are covered with an outer layer of brown hair instead of wool. The underparts of bighorn sheep are gray and their tails, backs of their legs, jaws, and noses are white. This coloring helps them blend in with the steep rocky slopes where they rest at night. One structural adaptation of bighorn sheep is their eyes are located on the sides of their heads, allowing them to see predators approaching from all directions or they have sharp-edged hooves that are split in half to help them climb and escape from predators.

### MULE DEER

Mule deer can be easily spotted on the edges of forests where they hide themselves in leaves and tall grasses. They can be identified by the way they jump and bounce while running. Male mule deer are known as bucks. Female mule deer are known as does and their babies are called fawns. At birth, fawns weigh about six pounds and are reddish colored with white spots. This coloring helps fawns by camouflaging them from eagles that like to swoop down and grab them. One structural adaptation of mule deer is their coloring helps hide them from predators or mule deer have a good sense of sight, smell, and hearing or their large feet help them dig for water that can be as deep as two feet underground. One behavioral adaptation of mule deer is when frightened, mule deer move in a series of stiff-legged jumps, with all four feet hitting the ground at the same time or mule deer eat so carefully, they can even pick the fruit off of prickly cactus.

### SHORT-FINNED PILOT WHALES

Short-finned pilot whales are members of the dolphin family. They are second in size only to killer whales. Pilot whales are carnivores that eat mostly squid and fish. They eat as much as 40 pounds of fish each day. Short-finned pilot whales do well in captivity and are very smart. One captive pilot whale was trained by Navy scientists to fetch objects from the ocean floor at depths of over 1,600 feet. Female short-finned pilot whales give birth to one calf every five to eight years. One structural adaptation of short-finned pilot whales is they have very few teeth which allows them to swallow many squid at one time. One behavioral adaptation of short-finned pilot whales is they are very social and usually travel in groups of 10 to 50 whales or they use squealing, whistling, and groaning sounds to communicate with one another and to locate food.

### BOTTLENOSE DOLPHINS

Bottlenose dolphins are strong animals with a short beak and a dorsal fin that sticks out of the water. Dorsal fins are body parts located on the backs of animals. Bottlenose dolphins are carnivores that eat a wide variety of fish including tarpon, sailfish, sharks, and catfish. Using 120 teeth, they eat between 36 and 72 pounds of food each day. Like all dolphins, bottlenose dolphins hold their breath to dive below the surface of the water. They open their blowholes and blow out air just before reaching the surface of the water. One structural adaptation of bottlenose dolphins is they have dorsal fins that help them steer and balance in the water. One behavioral adaptation of bottlenose dolphins is they use groans, whistles, and barks to find food.

### SPERM WHALES

Sperm whales are found in all of the world's oceans. Sperm whales are large, blackish-brown whales with huge heads and short snouts. Their heads can be one third the length of their bodies. Sperm whales have 20-26 pairs of cone-shaped teeth in their lower jaws and can weigh up to 40 tons. Sperm whales are carnivores that feast on squid, octopus, lobster, crab, and jellyfish. A single sperm whale eats more than a ton of fish and squid every day. One structural adaptation of sperm whales is their rib cages are flexible and their hearts can beat a few times per minute to help preserve their supply of oxygen. One behavioral adaptation of sperm whales is they communicate with other whales by whistling, squeaking, and groaning or they can swim 20 miles per hour when disturbed or frightened.