

WELCOME!



On behalf of Splash! Publications, we would like to welcome you to *Large Mammals* one of nine lessons in our *Arizona 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 **bison**, **canine**, **digest**, **extinct**, **illegal**, **inactive**, **mammoths**, **native**, **North America**, **pioneers**, **yucca**.

After reading *Large Mammals*, students will:

- answer *Large Mammals* Reading Comprehension Questions.
- use a graphic organizer to research and complete *Mammal Expert's Journal* Part I.
- take a Vocabulary Quiz for *Large Mammals*.

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

OTHER LESSONS IN OUR ARIZONA ANIMALS UNIT

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

VOCABULARY CARD



word: _____

definition: _____



VOCABULARY CARD



word: _____

definition: _____



VOCABULARY CARD



word: _____

definition: _____



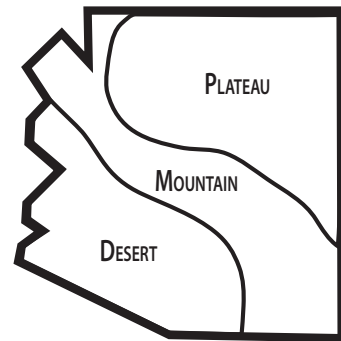


LARGE MAMMALS



Arizona is full of wildlife. More than 130 species of mammals roam Arizona's Desert, Mountain, and Plateau (pla•TOE) regions. When the first hunters entered Arizona, they found bighorn sheep, mule deer, and **mammoths**. Today, desert bighorn sheep have almost disappeared and mammoths are **extinct**. Most of Arizona's large mammals are protected by strict laws. It is **illegal** to hunt them without proper hunting permits.

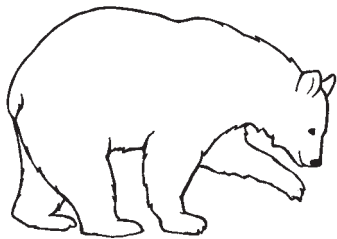
Some of Arizona's most popular large mammals include black bears, pronghorns, mountain lions, elk, bighorn sheep, mule deer, white-tailed deer, javelina (hae•vuh•LEE•nuh), and **bison**. As you read about Arizona's large mammals, pay special attention to what they eat and their structural and behavioral adaptations.



BLACK BEARS

Black bears are some of the largest mammals in **North America**. They used to roam throughout the state of Arizona, but today they can usually be found in the mountains and forested areas of our state.

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.



BLACK BEAR

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.

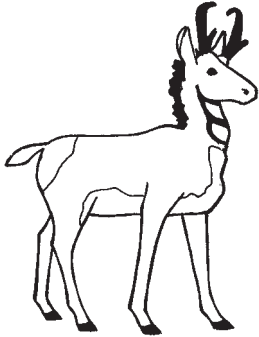
Female black bears give birth to one or two cubs every other year. Black bear cubs are blind at birth and only weigh about eight ounces. They stay with their mothers for about a year. Black bears grow very quickly. Full grown females can weigh as much as 600 pounds. Males can weigh up to 1,200 pounds!

Black 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.

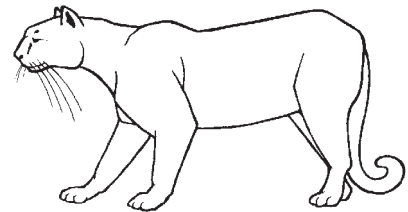
Pronghorns can survive in very hot and very cold temperatures. They are herbivores, which means they only eat plants. They eat shrubs, grasses, and even cacti. In Arizona, the largest numbers of pronghorns are found in the Desert and Plateau regions. Pronghorns are protected by strict laws. A limited number of hunting permits are issued each year by the Arizona Game and Fish Department.

MOUNTAIN LIONS

Mountain lions are the largest wildcats in the United States. They are also known as cougars, pumas, and panthers. Mountain lions can be found in all three of Arizona’s regions. 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.

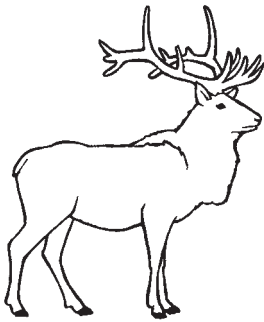
Mountain lions are shy animals. They are carnivores, which means they eat meat. Mountain lions are most active at night, hunting for deer, porcupines, and rabbits.



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 each other.

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. Elk roam the national forest lands in the Plateau region of our state.

DESERT BIGHORN SHEEP

Desert bighorn sheep live in Arizona's Desert region near the Colorado River. They have extremely good eyesight, very short tails, and pointed ears. The horns of male desert 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, desert bighorns are covered with an outer layer of brown hair instead of wool. The underparts of desert 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. Desert 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.



DESERT BIGHORN SHEEP

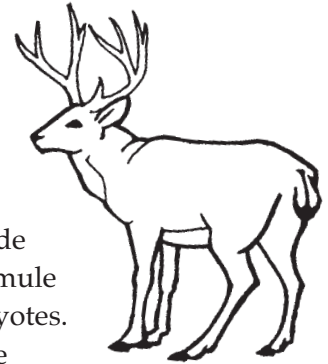
MULE DEER

Mule deer are the most popular large mammals to hunt in Arizona. 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.

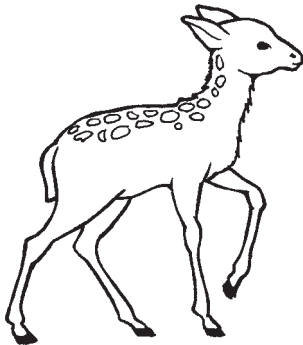
Mule deer have good senses of sight, smell, and hearing. Their large feet help them dig for water that can be as deep as two feet underground. Mule deer are herbivores that eat mostly leaves and shrubs. They eat so carefully, mule deer can even pick the fruit off of prickly cactus.



MULE DEER

WHITE-TAILED DEER

Arizona's white-tailed deer roam through the Mountain region of our state. They are very shy mammals with smaller ears than mule deer. Instead of antlers, white-tailed deer have tines or branches that grow from their heads and curve forward. Adult bucks have three or four tines per side.



WHITE-TAILED DEER

White-tailed deer are tan and white in color and move more gracefully than mule deer. They point their white tails straight into the air to warn other deer when they are in danger. This behavioral adaptation keeps white-tailed deer safe from predators that include mountain lions, bobcats, and coyotes.

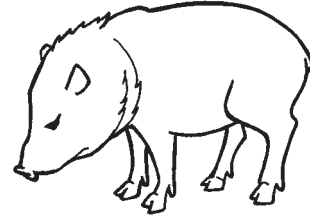
Full grown white-tailed bucks stand about 30 inches tall and weigh under 100 pounds. Does are much smaller and weigh about 65 pounds. Does usually give birth to a single fawn during their first delivery, followed by twins the next year.

White-tailed deer were very important during the early days of Arizona. Native Americans and **pioneers** used the meat of white-tailed deer for food and their skins for clothing and shelter.

JAVELINA (HAE•VUH•LEE•NUH)

Javelina are pig-like animals with dark gray coats and bands of white and black hairs around their shoulders and necks. They have very poor eyesight and hearing. To make up for this, Javelina have an excellent sense of smell. They also have very straight self-sharpening upper and lower **canine** teeth that they use to defend themselves and scare off predators.

Javelina can mostly be found in the Desert region. They live in caves and under ledges during the summer and winter. Javelina run in herds of 20 or more for protection and to make it easier to find food. They are omnivores that eat cactus fruit, roots, insects, mesquite (meh•SKEET) beans, and reptiles, including snakes. Javelina have special digestive systems that even allow them to eat prickly pear cactus, spines and all.

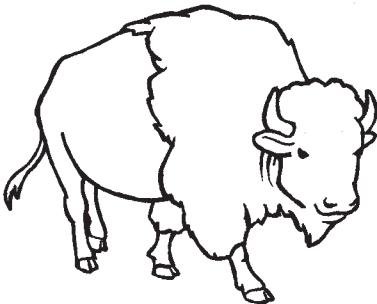


JAVELINA

Many female javelina give birth to two litters of piglets each year. Young piglets weigh about one pound at birth and begin to follow their mothers around when they are just a few hours old. It is difficult, however, for parents to protect their piglets from coyotes and bobcats. Many piglets are taken by these predators within the first few months of life.

BUFFALO

Buffalo, or bison, are not **native** to Arizona. This means that they were brought into Arizona from someplace else. There are only two herds in Arizona, but you will not find them roaming freely like it says in the song “Home on the Range.” The Houserock Wildlife Area north of the Grand Canyon, and the Raymond Wildlife Area east of Flagstaff, both in the Plateau region, are home to Arizona’s bison.



BUFFALO

Bison are the largest living members of the cow family. They are huge, hairy mammals with very large chests and small white horns on either side of their bearded faces. Their bodies are brown in color and their large heads and front legs are covered with long, dark brown woolly hair. This thick hair protects buffalo from cold winters in Arizona’s Plateau region.

Male bison, known as bulls, are ten feet long and can weigh between 1,400 and 2,500 pounds. Female bison, called cows, are about six feet long and weigh up to 1,600 pounds.

Adult buffalo eat about 35 pounds of grass and other plants each day. They have very poor eyesight, but they make up for it with excellent senses of smell and hearing. They can smell predators like wolves up to a mile away. Adult buffalo can run up to 35 miles per hour. They use their strong legs to jump over fences that are six feet high. Buffalo are social animals that live in herds, led by females.

Adult females give birth to one calf each year. Calves depend on their mother’s milk and protection from mountain lions. Special permits are required to hunt buffalo in Arizona. The Game and Fish Department is very careful to award only a few hunting permits each year.



LARGE MAMMALS



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

- 1 According to the first paragraph about Arizona's large mammals, mammoths are extinct. Extinct means –
- A moved to less populated areas
 B roams through all areas of Arizona
 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 deserts of Arizona
 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 Buffalo have very large chests.
 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 Javelina run in herds of 20 or more for protection and to find food.
 H Mountain lions use their tails to balance themselves.
 J White-tailed deer were used for food by Arizona's early Native Americans.
- 7 Which statement about buffalo is false?
- A Adult buffalo can jump fences.
 B Buffalo are native to Arizona.
 C There are only two herds of buffalo in Arizona.
 D Buffalo have huge chests.

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

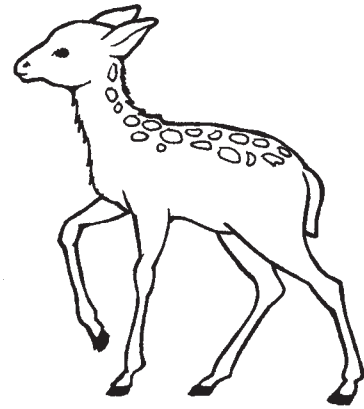
Arizona is home to many species of large mammals. You have learned so much information about Arizona's large mammals that you are ready to create the first part of a *Mammal Expert's Journal*. An *Expert's Journal* includes pictures and descriptions of each mammal that you have studied.

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

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

PART I DIRECTIONS:

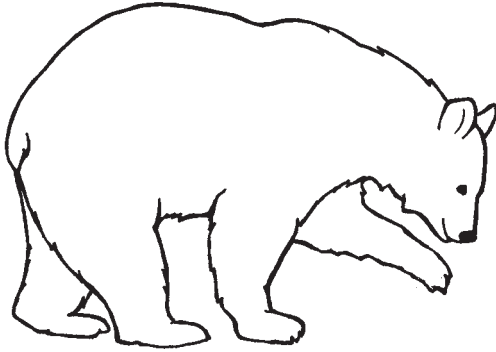
1. Use the 9 mammal pages and your information about Arizona's large mammals to correctly color each of the 9 large mammals.
2. Use your information about Arizona's large mammals and the lines provided on each of the pages to fill in the required information about each large mammal. Spelling Counts!
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*.



WHITE-TAILED DEER



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 _____

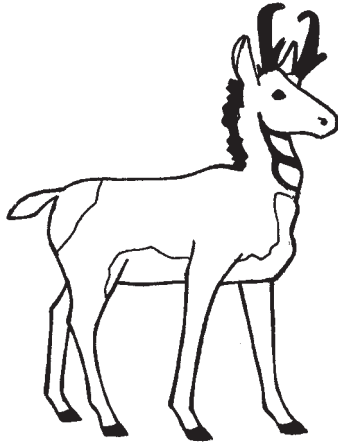
and full grown males can weigh _____

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 _____

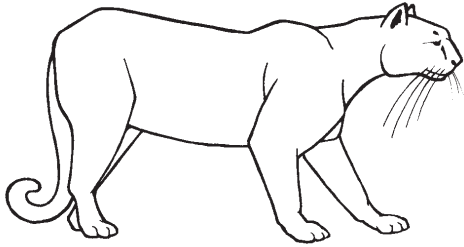
Pronghorns are herbivores. Herbivores are _____

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 _____

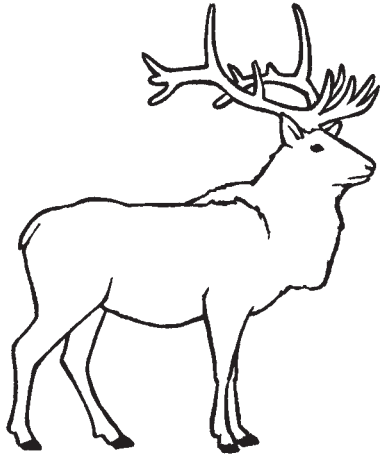
Favorite foods of mountain lions include _____

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 _____

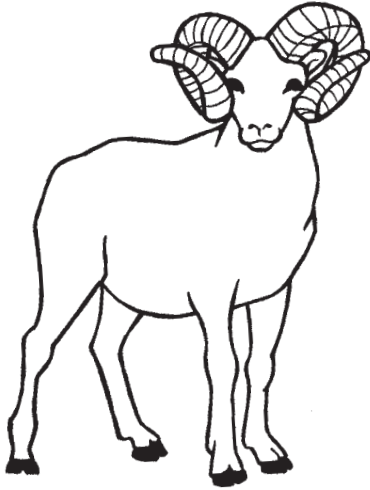
Antlers also help protect males when _____

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 _____

DESERT BIGHORN SHEEP



Desert bighorn 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 _____

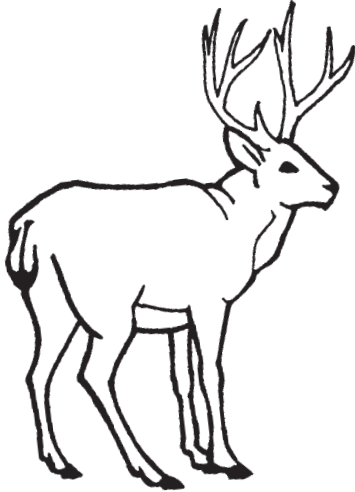
The underparts of desert bighorn sheep are _____

and their tails, backs of their legs, jaws, and noses are _____

This coloring helps them _____

One structural adaptation of desert bighorn sheep is _____

One other interesting fact I learned about desert 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 _____

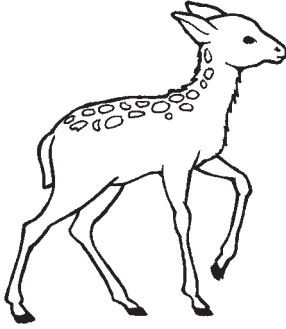
This coloring helps fawns by _____

One structural adaptation of mule deer is _____

One behavioral adaptation of mule deer is _____

One other interesting fact I learned about mule deer is _____

WHITE-TAILED DEER



White-tailed deer roam through the Mountain region of Arizona. They are very shy animals with smaller ears than _____
Instead of antlers, white-tailed deer have tines

that grow from their heads. Tines are _____

Adult bucks have _____ tines per side.

Full grown white-tailed bucks stand about _____

and weigh _____

Does are much smaller than bucks and weigh _____

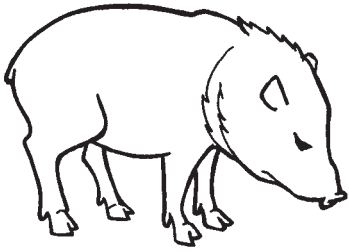
White-tailed deer were very important during the early days of Arizona because

Predators of white-tailed deer include _____

One behavioral adaptation of white-tailed deer is _____

One other interesting fact I learned about white-tailed deer is _____

JAVELINA



Javelina are wild pigs with dark gray coats

and bands of _____

around their necks. Javelina run in herds of

20 or more for _____

They are omnivores that eat _____

Javelina live in caves and _____

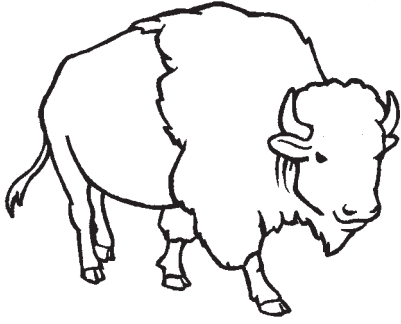
Each year, many female javelina give birth to _____

It is difficult for their parents to protect them from _____

Two structural adaptations of javelina are _____

One other interesting fact I learned about javelina is _____

BUFFALO



Buffalo are also known as _____

They are not native to Arizona. This means

Buffalo in Arizona can only be found in two places. They include _____

Both of these places are in the _____ region of Arizona. Male buffalo, known as _____ are ten feet long and can weigh _____ pounds.

Females are called _____. Females can weigh up to _____ pounds. Buffalo calves depend upon their mothers for _____ and _____

Two structural adaptations of buffalo are _____

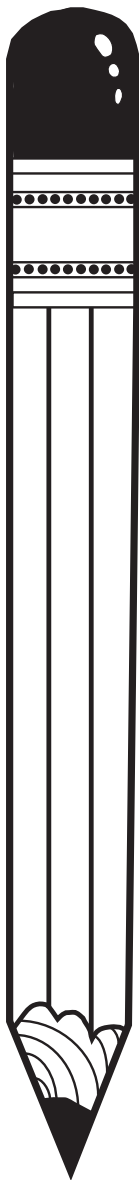
One other interesting fact I learned about buffalo is _____

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. _____ bison
5. _____ extinct
6. _____ illegal
7. _____ mammoths
8. _____ pioneers
9. _____ digest
10. _____ canine
11. _____ native



- A. large hairy extinct elephants with tusks that curved upward.
- 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. buffalo.
- E. surviving for a long time with no movement.
- F. pointed, cone-shaped teeth.
- G. no longer living.
- H. belonging to a place because of birth.
- I. early settlers who prepared the way for others to follow.
- J. the process used by the body to break down food so it can be used for vitamins and energy.
- K. against the law.

GLOSSARY



bi•son buffalo.

ca•nine pointed, cone-shaped teeth.

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

ex•tinct no longer living.

il•le•gal against the law.

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

mam•moths large hairy extinct elephants with tusks that curved upward.

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.

pi•o•neers early settlers who prepared the way for others to follow.

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 | 7. A |
| 2. E | 8. I |
| 3. C | 9. J |
| 4. D | 10. F |
| 5. G | 11. H |
| 6. K | |

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)

DESERT BIGHORN SHEEP

Desert bighorn sheep live in Arizona's Desert region near the Colorado River. 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 or they are able to get most of the water they need from the foods they eat.

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.

WHITE-TAILED DEER

White-tailed deer roam through the Mountain region of Arizona. They are very shy animals with smaller ears than mule deer. Instead of antlers, white-tailed deer have tines that grow from their heads. Tines are branches that curve forward. Adult bucks have three or four tines per side. Full grown white-tailed bucks stand about 30 inches tall and weigh under 100 pounds. Does are much smaller than bucks and weigh about 65 pounds. White-tailed deer were very important during the early days of Arizona because Native Americans and pioneers used the meat of white-tailed deer for food and their skins for clothing and shelter. Predators of white-tailed deer include mountain lions, bobcats, and coyotes. One behavioral adaptation of white-tailed deer is they point their white tails straight into the air to warn other deer when they are in danger.

JAVELINA

Javelina are wild pigs with dark gray coats and bands of white and black hairs around their shoulders and necks. Javelina run in herds of 20 or more for protection and to make it easier to find food. They are omnivores that eat cactus fruit, roots, insects, mesquite beans, and reptiles, including snakes. Javelina live in caves and under ledges during the summer and winter. Each year, many female javelina give birth to two litters of piglets. It is difficult for their parents to protect them from coyotes and bobcats. Two structural adaptations of javelina are they have an excellent sense of smell or they have very straight self-sharpening upper and lower canine teeth to defend themselves and scare off predators or they have special digestive systems that allow them to eat prickly pear cactus.

BUFFALO

Buffalo are also known as bison. They are not native to Arizona. This means that they were brought into Arizona from some place else. Buffalo in Arizona can only be found in two places. They include the Houserock Wildlife Area north of the Grand Canyon, and Raymond Wildlife Area east of Flagstaff. Both of these places are in the Plateau region of Arizona. Male buffalo, known as bulls are ten feet long and can weigh between 1,400 and 2,500 pounds. Females are called cows. Females can weigh up to 1,600 pounds. Buffalo calves depend upon their mothers for milk and protection from mountain lions. Two structural adaptations of buffalo are their thick hair protects them from cold winters in Arizona's Plateau region or they have excellent senses of smell and hearing or they use their strong legs to jump over fences that are six feet high.