



A Sea of Grass

A prairie is an ecosystem that is usually flat or has rolling hills. The main plants that grow on the prairie are grasses, and there are not many trees.

Use the map on the student pages to help answer questions

How many states have short grass prairie?

8 50 9 13

How many states have tall grass prairie?

12 7 23 42

How many states have all three kinds of prairie?

3 18 36 27

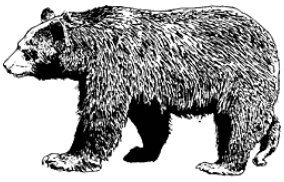
What kind of prairie is Wichita in?

Write your answer in the blank below.

_____ **Wichita is in the mixed grass prairie** _____

Fast Facts to Share

- ◆ There is only a small portion of the North American Prairie left. The same properties that made it a healthy grassland make it prime farming and grazing land. Today only small pockets of prairie are left, and they are mixed among agricultural lands.
- ◆ While at first glance the prairie doesn't look like a diverse landscape, it is. It is home to many animals and plants who can make a living only in the tall grasses.
- ◆ There is a lot more going on on the prairie than meets the eye! If you could look beneath the soil's surface on the prairie you would find many more microbes, animals and fungus than there are in the rainforest soil!
- ◆ Animals are usually better adapted to one prairie type over another. For example, prairie dogs prefer short grass prairie where they can better see predators as opposed to tall grass prairie that would provide good cover for hungry animals on the prowl!



Black Bear Necessities

Black bears are officially called **carnivores**.
Carnivores are animals that **eat meat**.

Below are three other words that tell us about animal eating habits. Match the words on the left with the best definition on the right.

- | | | |
|-------------|-------|---------------------------------------|
| Omnivore | — 3 — | 1. Eats insects |
| Herbivore | — 2 — | 2. Eats vegetation (fruit and leaves) |
| Insectivore | — 1 — | 3. Eats meat and vegetation |

Fast Facts to Share

- ◆ Black bears can consume up to 20,000 calories a day in the fall as they prepare for the winter. 20,000 calories are equivalent to the caloric value of almost 72 snickers bars! Now that's an appetite!
- ◆ Black bears as well as grizzly bears are not true hibernators. They do sleep through most of the winter and utilize stored fat, but they don't sleep as deeply as do true hibernators.

Black bears are excellent climbers: they climb trees to look for food and escape danger. What tools do you think they use to climb trees?

Circle the best answer below.

Sticky pads on their feet

Strong claws and powerful muscles

Great jumping ability

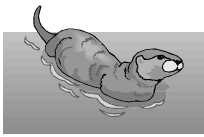
A full grown black bear can be 5 1/2 feet long from the tip of its nose to the tip of its tail! Using the tape measure in your backpack, measure the height of three people in your group.

*Write the measurements in the boxes below.
Draw a circle around the tallest measurement.*

Measurement
1

Measurement
2

Measurement
3



A Habitat Fit for an Otter

All animals need a safe and healthy habitat to survive. A good habitat always has four things. These four things are;

Food, Water, Shelter and Space

Carefully examine the otter exhibit and otters if you can see them.

After examining the exhibit, draw a picture of the four habitat components in the otter exhibit in the boxes below.



Food



Water



Shelter



Space

Fast Facts to Share

- ◆ Otters are cousins to weasels, ferrets and mink!
- ◆ Otters spend about half of their lives sleeping! Well, it does take a lot of energy to play so hard!
- ◆ River otters use dens at the water's edge for their shelter. Often they will take over abandoned burrows of other animals like the beaver!
- ◆ A river otter's tail is about 1/3 of its total body length! It uses its powerful tail to help it steer while swimming!

Otters are mammals. Test your knowledge about mammals. *Answer the questions below about mammals.*

Mammals are usually covered in what?

Fur

Mammal mothers feed their babies what?

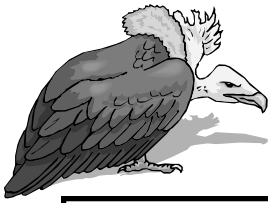
Milk

Mammals breath oxygen using what?

Lungs

* **Bonus!** Can you name one of the two mammals that lays eggs instead of giving birth to live young?

Duck Billed Platypus, Echidna



Victorious Vultures

Vultures have a bad rap for being gross and disgusting because of their eating habits and poor table manners. Without vultures and other scavengers, the planet would have piles of rotten decaying animals and trash!

Look closely at the turkey vulture's head. What color is it?

Red

Do you notice anything missing from the head?

YES

NO

If you circled yes, write what is missing in the blank.

Feathers

If you answered feathers, you are right! Below is a list of reasons that may explain why turkey vultures don't have feathers on their heads; *circle the best answer.*

Head feathers don't look cool

The vulture stays cooler without the feathers

Without the feathers, the vulture can stay cleaner and healthier

Fast Facts to Share

- ◆ Turkey vultures can eat up to 20% of their body weight at one sitting!
- ◆ Turkey vultures have been known to defecate (poop) on their legs in order to bring down their body temperature! Thank goodness we have technology on our side!
- ◆ Turkey vultures aren't nest builders, they lay eggs on the floor of caves, rock crevices and even under fallen logs!
- ◆ Turkey vultures can't sing or say much at all. The only vocalizations they make are hisses and grunts!

Turkey vultures have a better sense of smell than most birds, and that is one tool they use to find their food. How else do you think the vulture finds its supper?

Write your answer below.

Turkey vultures also use their sense of sight. The vulture also uses the wind currents to glide. This allows them to stay on the look and smell out longer without using as much energy!



Prancing Pronghorn

Use your binoculars to observe the pronghorn. In the space below, write what you see them doing, then draw a picture of what you observed.

We observed the pronghorn

Students can observe with more than their eyes. Encourage your group to listen, smell and feel what is going on all around them!

(Draw your picture below.)

Fast Facts to Share

- ◆ Pronghorn have among the largest eyes in the animal world! They measure almost two inches wide, almost as big as an elephant's eyes! The pronghorn's field of vision is almost 360°, nearly a full circle around them!
- ◆ There are many stories of racing pronghorn! They race each other to show dominance and to have a little fun, and they have also been said to race cars!
- ◆ The pronghorn is a great runner, but not the best jumper! When faced with obstacles pronghorn will go under or around rather than jump over them!
- ◆ Pronghorn do not have true horns! True horns are not branched and are not shed, but the pronghorn has branched horns that they shed!
- ◆ The pronghorn will flare out the white hairs on its rump to signal other herd members of impending danger!

Pronghorn can run up to 55 miles per hour, and run that speed for several miles! Not even a cheetah can run that fast for that long! Why do you think that pronghorn developed the ability to be such great runners?

Write your answer in the space below

Pronghorn have to run fast to escape from predators. Pronghorn don't have claws or sharp teeth to protect themselves, so fleeing is the best defense!

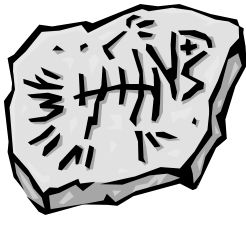
Pronghorn rarely drink water. How do you think the pronghorn gets the water it needs to survive?

Circle the best answer below.

Pronghorn get most of their water from their food

Pronghorn just don't need water

Pronghorn absorb water through their feet



Fossil Frenzy

In your backpack, you will find a plastic bag with a rock that is filled with many tiny fossils of an ancient animals and a fact sheet. Use the fossilized animals, fact sheet and the magnifying glass in your backpack to answer the questions below.

Use the magnifying glass to closely examine the fossil. After you have taken a very good look ,draw your fossil below.

What kind of fossil is in your bag?

(Remember to use your fact sheet!)

Triticites

What kind of environment did your fossilized animal live in?

A shallow inland sea

What was Kansas once covered with?

A shallow sea

What is the largest size your fossilized animal could have reached?

Little less than half an inch

What did your fossilized animal eat?

They made their own food by a process called photosynthesis

What is the word Triticites Latin for?

Wheat

Fast Facts to Share

- ◆ Fossils are valuable tools for paleontologists (scientists who study fossils and ancient life). Paleontologists can tell many things about ancient environments from fossils.
- ◆ The fossils in the backpacks are ancient animals, but there are still living fusulinids in our oceans today!
- ◆ Kansas is a great place to find fossils. The softer limestone which the fossils are often encased in erodes easily and leaves the ancient fossil uncovered. The flint hills region of our state is rich in fossils; remember that you should always have landowner permission before setting off on a fossil hunt!
- ◆ Almost anything can become a fossil if it falls into the right place. Footprints, bones, even eggs and nests can make fossils. Did you know defecation can become a fossil? Fossilized defecation is called coprolite.
- ◆ The fossils of Kansas range from the small one cell creatures that your students have a sample of to large dinosaurs and even mammoths!



Pouncing Pumas

The puma has sharp claws that retract, or are pulled into a protective pouch of skin, when they are not using them.
*Below are some reasons that the mountain lions and other members of the cat family may have retractable claws.
Circle the best answer.*

It helps keep their nail polish from chipping

The claws are protected from breaking and stay sharp

By retracting the claws it keeps their toes strong

Pumas are predators, or animals that hunt for their food.
In the space below, write why you think that the color of the mountain lion's fur helps it be a better predator.

The color of the puma's coat allows it to blend in with its environment, or become camouflaged. This allows the puma to better stalk its prey and make a surprise ambush!

Fast Facts to Share

- ◆ Pumas are known by many names, such as mountain lion, and cougar. In order for the scientific community to keep everything straight they give plants and animals scientific names.
- ◆ When people and pumas cross, it can be bad for both. Pumas have been known to attack people, especially children and small adults. This behavior usually results in the puma being killed and removed from the area. Since humans are moving ever deeper into puma territory, it is important to know how to best handle yourself around these majestic cats. For tips go to:

<http://www.mountainlion.org>

Pumas have the greatest jumping ability in all of the cat family. They can jump as high as 18 feet up into the air! We know pumas can jump high, but lets see how **far** kids can jump! *Choose the three best jumpers in your group and have a jump off! Use the tape measure to measure who jumps the farthest!*

After writing down jump distances in the boxes below, draw a circle around the farthest jumper's box.

Jumper # 1

Jumper # 2

Jumper # 3