

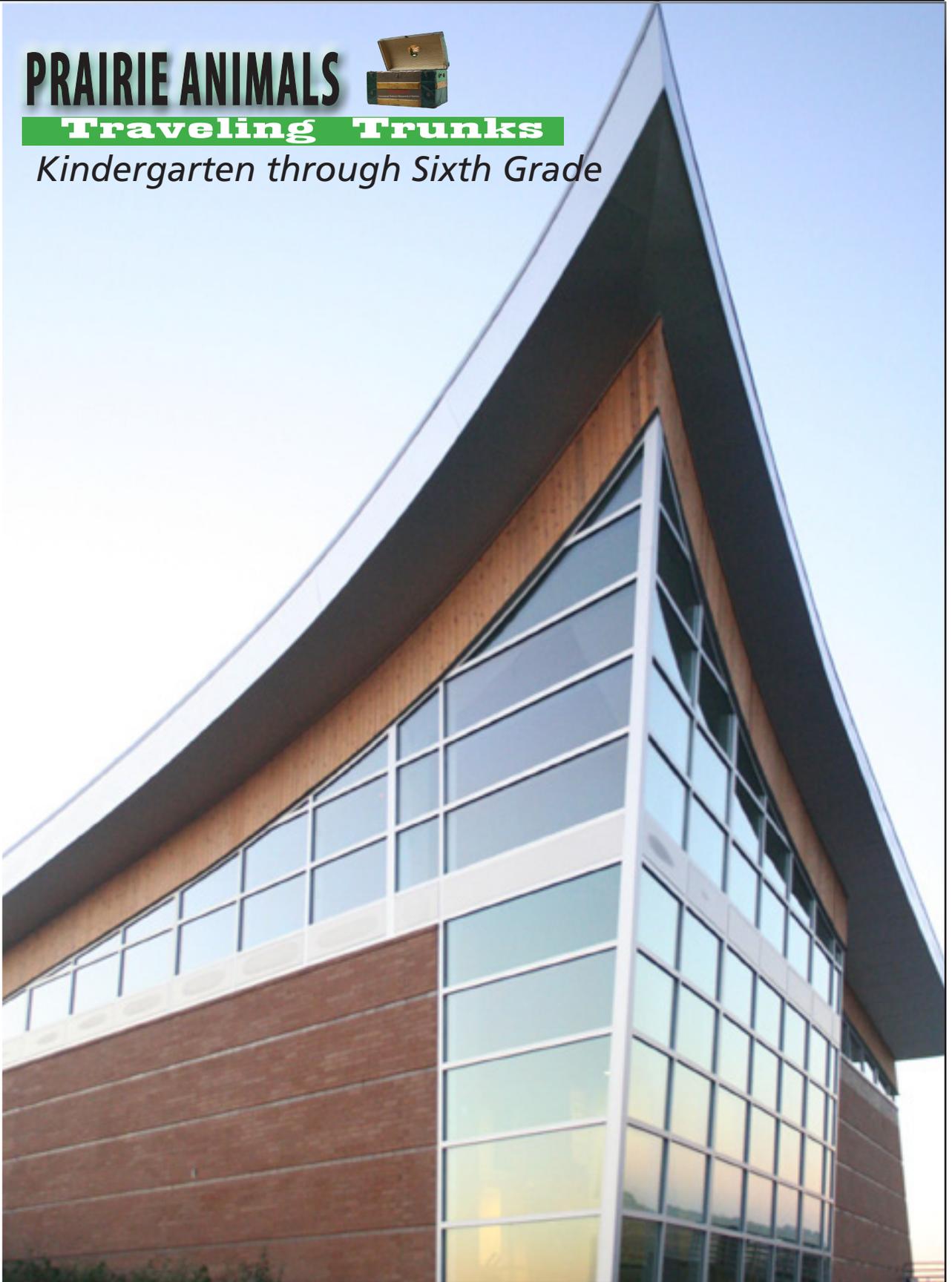
**Free Land was the Cry!**

# PRAIRIE ANIMALS



## Traveling Trunks

*Kindergarten through Sixth Grade*



# Homestead

National Park Service  
U.S. Department of the Interior

Homestead National Monument  
of America, Nebraska



# ACKNOWLEDGEMENTS

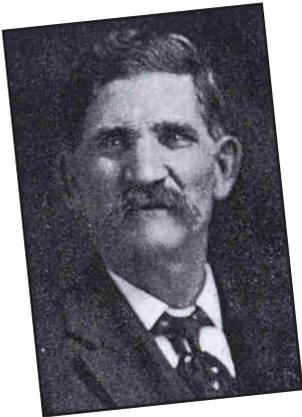
## Primary Authors

Tina Miller, Education Coordinator,  
Homestead National Monument of America  
Doris Martin, Park Guide,  
Homestead National Monument of America

Our thanks to the following people  
for their contributions to our project:

Merrith Baughman, Chief of Interpretation and Resource Management,  
Homestead National Monument of America  
Mark Engler, Superintendent, Homestead National Monument of America

## Prairie Animals

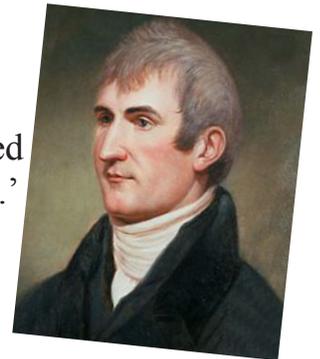


‘A snake story was told in our neighborhood about a family named Mer-  
ick, who lived in a sod house within a few miles of our place. At one time  
when the housewife, Mrs. Merick, was taking down a dress which had  
been hanging or lying against the sod house wall, she found a rattlesnake  
snugly curled up, making itself at home in the folds of her dress.

*Adolph Roenigk*

‘The weather was fine and moderate. The hunters all returned, having killed  
during their absence three elk, four deer, two porcupines, a fox and a hare.’

*Meriwether Lewis*



‘Ivar sat down on the floor and tucked his feet under him. “See little  
brother, they have come from a long way, and they are very tired. From  
up there where they are flying, our country looks dark and flat. They  
must have water to drink and to bathe in before they can go on their  
journey. They look this way and that, and far below them they must see  
something shining, like a piece of glass set in the dark earth. That is my  
pond. They come to it and are not disturbed. Maybe I sprinkle a little  
corn. They tell the other birds, and next year more come this way.  
They have their roads up there, as we have down here.’

*O Pioneers by Willa Cather*



# TABLE OF CONTENTS

This unit has activities to acquaint students in grades kindergarten through sixth with prairie animals.

<b>Program Description .....</b>	<b>Page 4</b>
<b>Curriculum Objectives, National Standards .....</b>	<b>Page 5</b>
<b>Station Activity #1: Herbivore? Carnivore? Omnivore? .....</b>	<b>Page 6</b>
<b>Station Activity #2: Animal Folktale .....</b>	<b>Page 7</b>
<b>Station Activity #3: What do Skulls Tell Us? .....</b>	<b>Page 8</b>
<b>Station Activity #4: What Animal Am I? .....</b>	<b>Page 9</b>
<b>Station Activity #5: Whose Tracks Are These? .....</b>	<b>Page 10</b>
<b>Station Activity #6: Who Dung It?.....</b>	<b>Page 11</b>
<b>Classroom Activity #1: Tracking Prairie Animals .....</b>	<b>Page 12</b>
<b>Additional Resources including Homestead Handouts .....</b>	<b>Pages 13-19</b>

Some of the ideas in this lesson may have been adapted from earlier, unacknowledged sources without our knowledge. If the reader believes this to be the case, please let us know, and appropriate corrections will be made. Thank you.

# PROGRAM DESCRIPTION



‘What is life? It is the flash of a firefly in the night. It is the breath of a buffalo in the wintertime. It is the little shadow which runs across the grass and loses itself in the sunset.’

*Crowfoot quote*

The original animals of the tallgrass prairie were much more varied than can be seen today. The animals and the native plants created an interconnected ecosystem. Because of the loss of many native prairie habitats and overhunting in the 19th century, the biodiversity of animals viewed by the first settlers no longer exists.

It can still be debated whether some of the species we consider to be native to grasslands are recent adapters to the prairie or long time residents. In the forested areas, animals tend to travel alone except in the mating season. Herds of animals are really a

phenomenon of the expansive prairies of the past as is the quick maneuverability and speed of some prairie dwelling animals. On the prairie, we find not only mammals, but a variety of birds, reptiles, and other species which adapted to life on the Great Plains.

Of all the species, the birds tend to be the most diverse and numerous. Here, in the Great Plains, is where the meadowlark, dickcissel, red-tailed hawk, prairie chicken, bobolink, sandhill crane, upland plover, sparrow hawk, swallow-tailed kit, bobwhite quail, great curlew, mourning dove, and many more make their homes. The mammals and reptiles of the prairie are the animals that we commonly associate with the western United States; bison, coyote, antelope, badger, elk, prairie dog, various skunks, otters, foxes, snakes, lizards, among many others. Some have survived and adapted to the changes on the grassland, but many have decreased in number, dependent on the prairie that started to vanish with the tilling of the land.

# CURRICULUM OBJECTIVES

- Students will be able to identify prairie animals by their tracks, furs and scat.
- Students will learn about herbivores, carnivores, and omnivores.
- Students will learn to observe, predict, hypothesize, and draw conclusions.

# NATIONAL STANDARDS

This unit is broken up into different grade levels, so there are many standards that could apply. These are just a few of them.

## **NS.K-4.3 LIFE SCIENCE**

As a result of activities in grades K-4, all students should develop understanding of

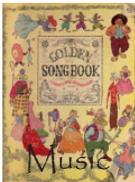
- The characteristics of organisms
- Life cycles of organisms
- Organisms and environments.

## **NS.5-8.3 LIFE SCIENCE**

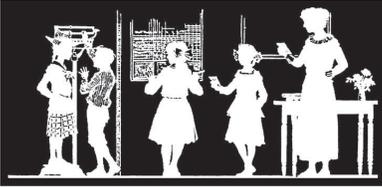
As a result of their activities in grades 5-8, all students should develop understanding of

- Structure and function in living systems
- Reproduction and heredity
- Regulation and behavior
- Populations and ecosystems
- Diversity and adaptations of organisms.

## SPECIAL ICONS

	<i>Enrichment Activities</i>		<b>Cool Internet Sites:</b>		<i>Language Arts</i>
Indicates a reproducible handout is included		Indicates an additional math lesson		Indicates an additional music or art activity	
	Indicates advanced lessons				Indicates an additional language arts lesson

## Station Activity #1

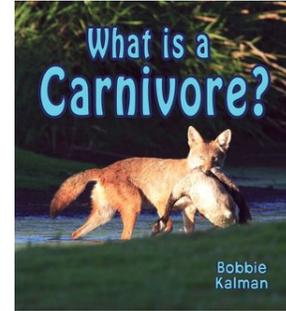
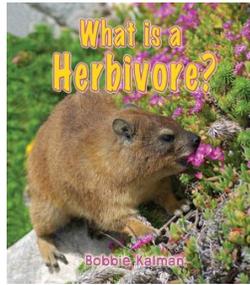
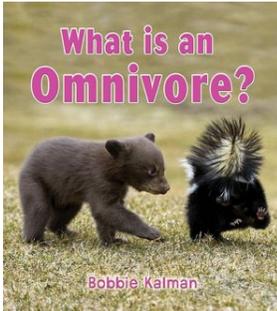


# HERBIVORE? CARNIVORE? OMNIVORE?

Animals are living things and all living things need food to survive.

This unit shows how the living things on the prairie interact and how they survive.

## Younger Students



Read to or have younger students listen to the audio cd included with each of the following books; *What is an Omnivore?* *What is a Herbivore?* *What is a Carnivore?* all by Bobbie Kalman.

Discuss the key vocabulary: carnivore, herbivore, omnivore, predator, prey, mammal and reptile.

Show students the animal pictures in the folder and have them classify the animal as a herbivore, carnivore or omnivore. Ask the follow up question as to whether or not the animal is predator or prey.

Students may do the crossword titled Animals and What They Eat to reinforce the terms.



## Older Students

Have students brainstorm about animals that live on the prairie and what they eat. They may think of mammals, birds, and insects. Introduce or review the terms: herbivore, carnivore, omnivore and food chain.

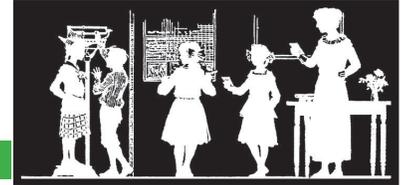


At this station students will hypothesize whether or not an animal is a herbivore, carnivore or omnivore and identify whether or not it is predator or prey by filling out the worksheet.

A crossword puzzle titled Animals and More is available to reinforce these concepts.



# ANIMAL FOLKTALE



## Materials

*The Girl Who Loved Wild Horses* by Paul Goble

*Buffalo Woman* by Paul Goble

*The Gift of the Sacred Dog* by Paul Goble

Read a book by Paul Goble, either those provided or others.

Have students create a folktale with a prairie animal as the main character. Students should use personification and try to use similes.

Elements of a folktale:

- Are usually about ordinary people and everyday life.
- Include setting, characters and a problem to solve.
- Have characters represent a trait such as honesty or cleverness.
- Intentionally exaggerate to teach a lesson.

### Prewriting:

For your prewriting notes, list some unusual animals and choose one of them. Think about how the animal will show its special qualities. List some similes you might use. Then, list the events of your tale.

### Drafting:

In drafting the tale, follow the list of events that you compiled in your prewriting notes. Write at least a paragraph (or more) for each event.

### Revising:

Share your folktale with a partner. Check for clarity and completeness of events and descriptions. Have your partner read your folktale to you.

### Publishing:

Type your finished story on the computer, print it, and add your own illustrations.

For **Younger Students** you may read one of the stories provided and have them draw a picture about the story or about an animal.



American Indians recorded the details of their lives by painting pictures on bison hides. A “winter count” depicted the events of the past year or several years.

Use your detective skills to figure out the story being told on the buffalo hide on the American History Smithsonian Institute website at:

<http://americanhistory.si.edu/buffalo/hideactivity.html>



## Language Arts

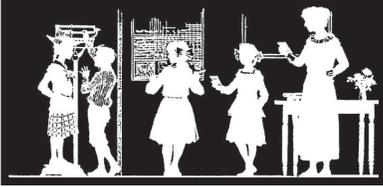


## Definitions

Personification - Giving an animal human qualities.

Simile - A figure of speech that shows a resemblance or similarity between two unlikely things. A simile usually uses “like” or “as.”

## Station Activity #3



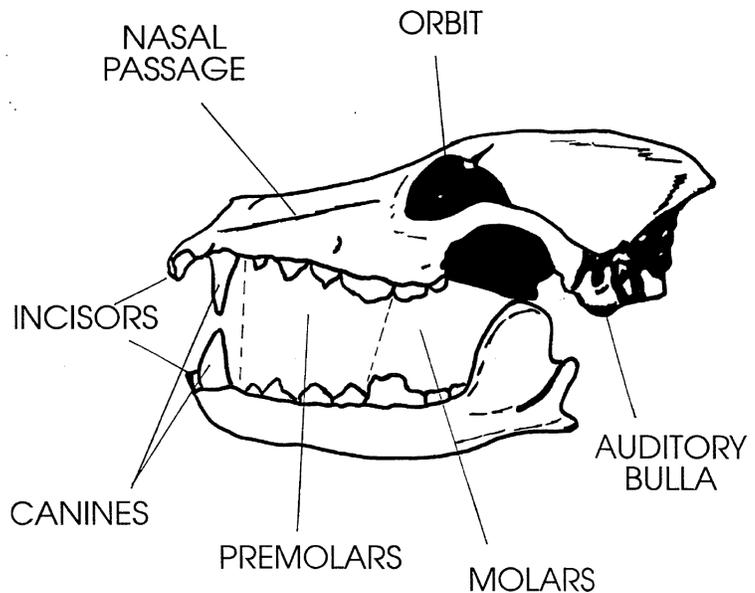
# WHAT DO SKULLS TELL US?

Animal skulls can tell us a lot about the animal and how they survived in their particular environment. By observing the animal skull we can tell what the animal ate, whether the animal was predator or prey and which senses were important to their survival.

The teeth in an animal skull can tell us whether the animal was a **carnivore**, a **herbivore** or an **omnivore**.

Characteristics of them are:

**Carnivores** Canine teeth are long and pointed for piercing and holding prey. Cheek teeth are sharp and pointed for cutting and tearing flesh. Because carnivores have long canine teeth and overlapping cheek teeth, they do not have the ability to move the lower jaw from side to side in a chewing motion, so they tend to bite, tear and gulp food without any chewing action.

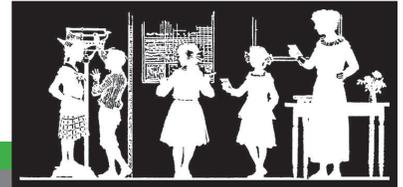


**Herbivores** have large, well developed incisors for cutting plant material. Most herbivores do not have upper incisors or canine teeth. Instead they have a hard upper palate that serves as a “cutting board” for the lower teeth to cut through plant stems. Their cheek teeth are large and wide with high, sharp crowns for grinding and chewing plant material. Herbivores have side-to-side movement of the lower jaw and are able to chew food, which causes their teeth to wear with age.

**Omnivores** have a combination of carnivore and herbivore teeth characteristics. They have large and well developed incisors for cutting plant material and long and pointed canine teeth for killing and holding prey.

Using characteristics of the teeth, students will identify the skulls at this station as either carnivores, herbivores or omnivores and then identify them as predator or prey. If students wish, they may try to identify the specific animal as well.





# WHAT ANIMAL AM I?



Euro-American settlers wrote of seeing too many buffalo to count. Many killed the bison for sport; however, most were killed to supply northeastern industrial efforts. Hides made excellent strapping material and conveyor belts, essential to new and expanding factories. While the furs and hides were sent back east the carcass was left on the prairie to rot. With more settlers, expanding railroads, and increased industrialism, the bison nearly vanished.

Man has hunted animals for food and clothing for centuries. When homesteaders moved west there were no grocery stores where they could go and get meat for their family to eat like there are today. This lesson will help students identify some of the animals found on the prairie today and when homesteaders settled the west.

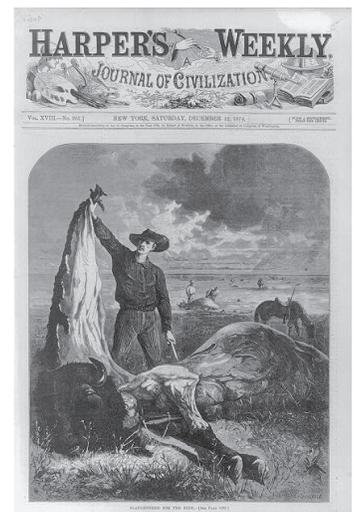
Students will examine each fur at the station and in groups or individually try to identify what each animal is and characteristics about it that help it survive on the prairie.



## Enrichment Activities

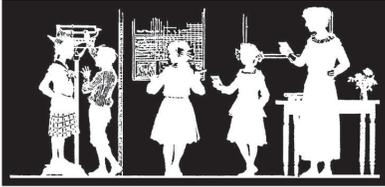


Animals have adapted to their environment for centuries. Have students draw a picture of their own animal with adaptations and explain how their adaptations will help them survive. Be sure students identify whether their animal is a carnivore, herbivore or omnivore.



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LC-USZ62-5562

## Station Activity #5



# WHOSE TRACKS ARE THESE?

Have you ever taken a walk outside and come across a track in the mud or sand? Did you wonder what animal left that track? Homesteaders used the tracks left behind by animals to find them while hunting. At this station students will identify different animals tracks.



## Younger Students

Read *Big Tracks, Little Tracks Following Animal Prints* by Millicent E. Selsam and *Whose Tracks Are These?* by Jim Nail to give students an idea of how to identify tracks and match them to the animal who might have left them.

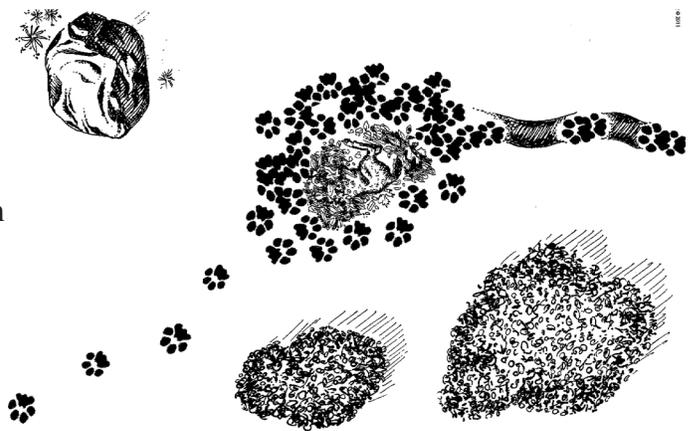
Then using the tracks at the station have the students match the animal pictures to the tracks. When all the matches are made, ask the students why they think that track belongs to that animal and what about the track helps the animal survive.

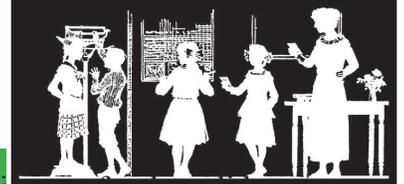
Students may also play the Animal Tracks game at this station. This game can either be played as a Guess the Tracks game, Concentration or Bingo. See the instructions included.

## Older Students

Older students will use the tracks at the station to match the animal pictures to the tracks. When all the matches are made, have the students play the Carnivore Crossroads Game. The Carnivore Crossroads game is a unique set of eight 6 inch x 9 inch tracking cards to naturally engage students in the scientific method. Students learn to observe, form hypotheses, analyze data, predict, re-form hypotheses, and develop conclusions. Cards are laid out one at a time, each card presenting a connected but new sequence of tracks, providing new data for speculation.

Animals presented in the Carnivore Crossroads Game include mountain lions, deer, bear and crows.





# WHO DUNG IT?



Dung is also known as scat. Scat is a generic term for the solid excrement of living creatures in general. It can tell a tracker important things about the animal that left it.

**NEVER handle scat without gloves.**

There are lots of identifying characteristics of scat that a tracker uses to identify the animal that left it.

For example:

All scat leaves an odor.

Carnivore scat has a stronger odor and is quicker to decay.

Herbivores leave pellets or flattened “pies” of scat.



Most animals use scat to mark their territorial boundaries.

The scent of scat is unique to each animal, just like a fingerprint is to humans.

Scat can also be used as camouflage. Prey animals such as deer and rabbits leave scat randomly along trails, near feeding areas, and around bedding grounds to present a maze of scents to distract predators.

With these things in mind, students will try to match the scat with the animal that produced it.

## Raccoon Scat: A Tasty Outdoor Snack!



Have fun with your students and make raccoon scat for them to try!

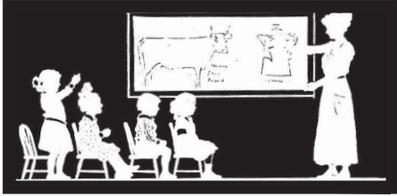
- 3 Tbs butter
- 1 12 oz bag marshmallows
- 1 12 oz bag semi-sweet chocolate morsels
- 10 oz of raisins or craisins (berries)
- 2 cups crispy rice cereal (insects and crayfish parts)

1. Melt butter over low heat in a large saucepan.
2. Add marshmallows and allow to melt, stirring often. Once marshmallows are mostly melted, add chocolate morsels and stir until everything is melted.
3. Add raisins, craisins and cereal to mixture, stir (Amounts are approximate and may need to be adjusted until you get the right consistency.)
4. Use a spoon to scoop out cookies onto waxed paper or cookie sheet.
5. Form to look like raccoon scat.
6. Allow to cool .

### No time to bake?

Raisinettes can be used for deer, rabbit or squirrel scat.

## Classroom Activity #1



# TRACKING PRAIRIE ANIMALS

Do you have a hiking trail, woods, pond or other good place to walk near you?  
If so, take your class outside and have them look for animal tracks of their own.

Before you leave discuss the following questions:

- What animals live in our area that we might see today?
- What do you see in mud after you step in it?
- You and your brother step in mud.

What is different about your footprints?

- What are ways we know an animal has been here?
- On what kind of ground would you find tracks?
- How might animal tracks look different?



Divide participants into groups of 3 to 5 students with one adult for each group.

Using the Prairie Animal Hike worksheet have students write down what animal they think left the track, draw the track and what they think the animal eats.

For younger students one sheet can be used by adult.

### Prairie Animal Hike Worksheet

Name \_\_\_\_\_

<p>1.</p> <p>What animal made this track?</p> <p>_____</p> <p>What does this animal eat?</p> <p>_____</p> <p>Draw the track in the box.</p>	<p>2.</p> <p>What animal made this track?</p> <p>_____</p> <p>What does this animal eat?</p> <p>_____</p> <p>Draw the track in the box.</p>
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# ADDITIONAL RESOURCES

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*Big Tracks, Little Tracks Following Animal Footprints* by Millicent E. Selsam, HarperCollins, 1995

*Buffalo Woman* by Paul Goble, Aladdin Paperbacks, 1976

*The Girl Who Loved Wild Horses* by Paul Goble, Aladdin Paperbacks, 1978

*The Gift of the Sacred Dog* by Paul Goble, Aladdin Paperbacks, 1980

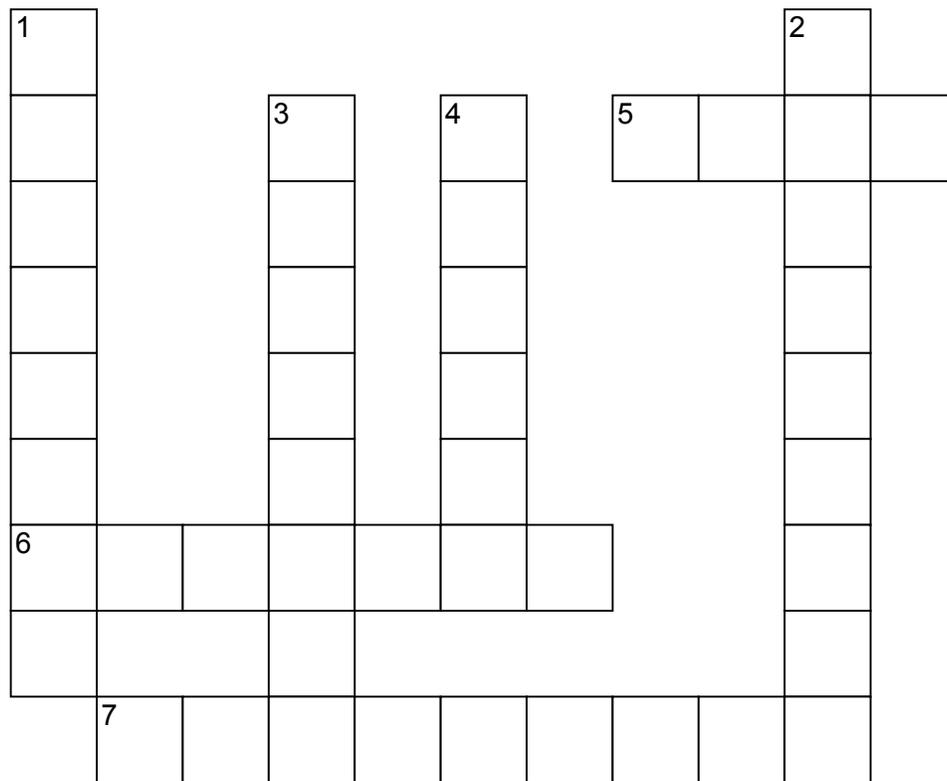
*What is a Carnivore?* by Bobbie Kalman, Crabtree Publishing Company, 2011

*What is a Herbivore?* by Bobbie Kalman, Crabtree Publishing Company, 2008

*What is an Omnivore?* by Bobbie Kalman, Crabtree Publishing Company, 2008

*Whose Tracks are These?* by Jim Nail, Roberts Rinehart Publishers Inc, 1994

# Animals and What They Eat



www.CrosswordWeaver.com

## ACROSS

- 5** an animal that is hunted and eaten by another animal
- 6** an animal with a backbone, cold blood, and scaly skin for example a snake
- 7** an animal that eats other animals

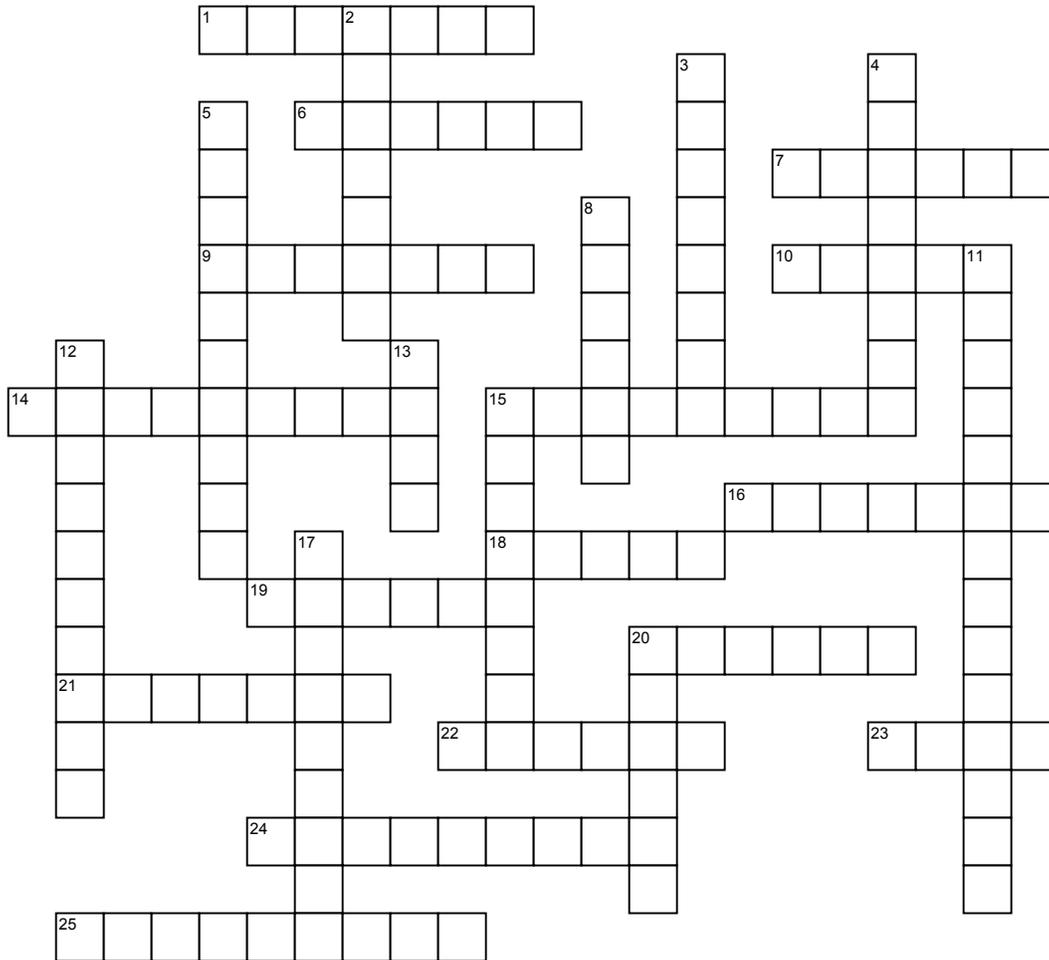
## DOWN

- 1** an animal that eats both plants and animals
- 2** an animal that feeds on plants
- 3** an animal that hunts and eats other animals
- 4** an animal with hair or fur with a backbone, breathes air and drinks its mother's milk as a baby

**WORD BANK:** Carnivore, herbivore, mammal, omnivore, predator, prey, reptile.



# Animals and What They Eat



This puzzle was made by Homestead National Monument of America using Crossword Weaver(TM)

## ACROSS

- 1 changed to become more suited to something
- 6 to break down food in the stomach and intestines so it can be used
- 7 the strength to use one's body; the power needed to move and grow
- 9 an animal with a backbone, cold blood, and scaly skin for example a snake
- 10 an area of and covered by water
- 14 an animal that feeds on plants
- 15 an animal that collects anything that can be eaten; scavengers eat dead plants and animals
- 16 a sickness
- 18 a poison found in the bodies of some snakes
- 19 insects that have hatched from eggs; caterpillars and grubs are examples
- 20 an animals that eats grass in a field
- 21 a grassy plain with few trees that is found in hot, dry places
- 22 a sweet liquid inside flowers that insects eat and bees use for making honey

- 23 an animal that is hunted and eaten by another animal
- 24 a pattern of eating and being eaten
- 25 important parts of foods that keep living things alive and healthy

## DOWN

- 2 a mammal that has hands, handlike feet, and eyes that face forward such as a monkey
- 3 an animal that eats both plants and animals
- 4 an animal that hunts and eats other animals
- 5 describing food that helps the body grow and stay healthy
- 8 an animal with hair or fur with a backbone, breathes air and drinks its mother's milk as a baby
- 11 the use of sunlight by plants to make food from air and water
- 12 a living thing that breaks down dead plants or animals
- 13 a large group of animals that feed, travel and live together
- 15 to look for and collect anything that can be eaten
- 17 an animal that eats other animals
- 20 the seeds of plants such as wheat

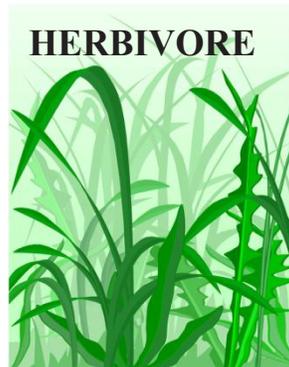
**WORD BANK:** Adapted, carnivore, decomposer, digest, disease, energy, foodchain, grains, grazer, herbivore, herd, larvae, mammal, nectar, nutrients, nutritious, omnivore, photosynthesis, predator, prey, primate, reptile, savanna, scavenge, scavenger, swamp, venom.



## What am I?

### Herbivore? Carnivore? Omnivore?

Match the animal to what it eats by drawing a line to either herbivore, carnivore or omnivore.





## Who Am I?

Look at each fur at this station and using the table below write down characteristics of each. When you are finished see if you can identify the prairie animals based on its fur.

Skin Number	Color?	Size?	Feel?	Animal?
1				
2				
3				
4				
5				
6				
7				
8				

# Prairie Animal Hike Worksheet

Name \_\_\_\_\_

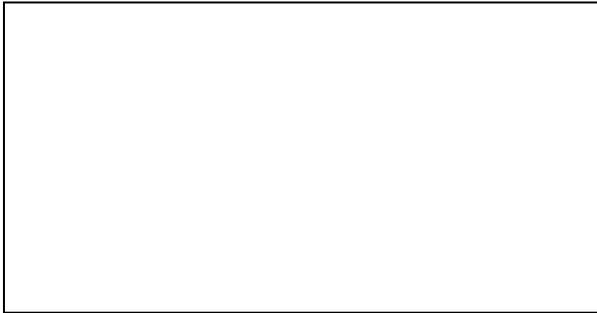
1.  
What animal made this track?

\_\_\_\_\_

What does this animal eat?

\_\_\_\_\_

Draw the track in the box.



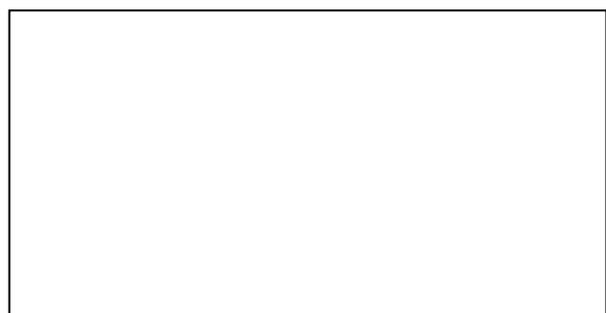
2.  
What animal made this track?

\_\_\_\_\_

What does this animal eat?

\_\_\_\_\_

Draw the track in the box.



3.  
What animal made this track?

\_\_\_\_\_

What does this animal eat?

\_\_\_\_\_

Draw the track in the box.



4.  
What animal made this track?

\_\_\_\_\_

What does this animal eat?

\_\_\_\_\_

Draw the track in the box.

