



JUNIOR RANGER

Activity Booklet



An Activity Guide for Ages 5 and Older

Become a Junior Ranger of the MNRR

You can earn your MNRR badge by completing the designated pages in this book for your age level. The answers and information you need can be found in the book or at nps.gov/mnrr.



Ages 5-7 Complete any 5 of Roscoe's activities

Ages 8-10 Complete any 8 of Roscoe's activities

Ages 11 and up Complete all of Roscoe's activities

Bring in your completed activities booklet or send to:

Missouri National Recreational River

508 E 2nd St

Yankton SD 57078

Your National Parks



The National Park Service celebrated its **centennial** or 100th birthday in 2016. It is committed to the task of preserving America's special places and history so that everyone can enjoy and learn about them. Becoming a junior ranger is a good way to understand why we have our national parks today and what the parks do to ensure these special places will be here for others to enjoy in the future.

Junior Rangers Pledge to

- Tell their friends about the parks they visit and why they are special places.
- Always follow park rules and explore safely.
- Learn about the plants and animals, and never disturb them or feed the animals.
- Never litter and always help pick up after people who don't know how to care for their parks.

Fill out your name and address below so the rangers can send you your badge and certificate.

Name_____Age_____

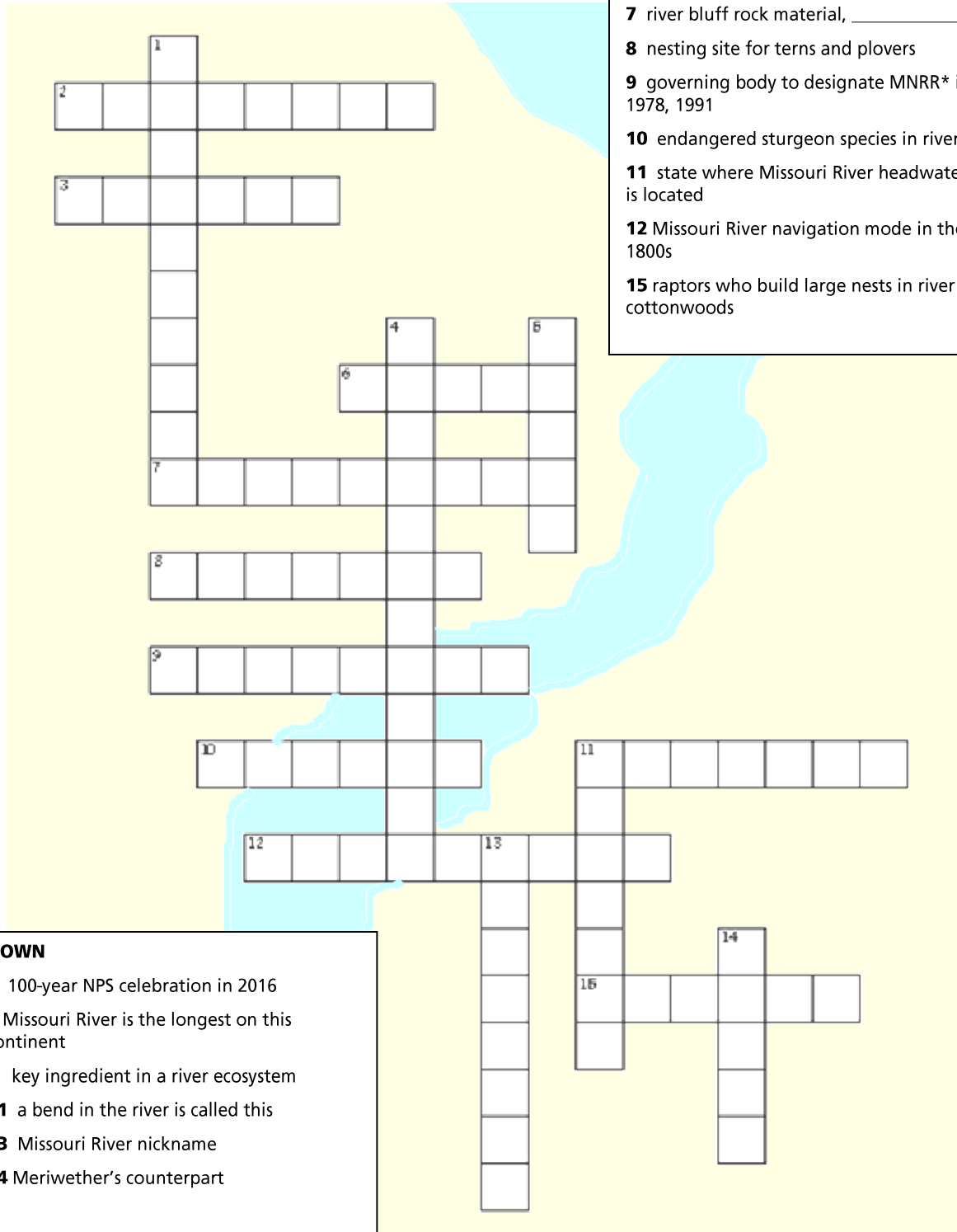
Address_____

City_____ST____ Zip_____



Meander MNRR

Have fun as you meander your way through this crossword puzzle to learn more about the Missouri National Recreational River.



ACROSS

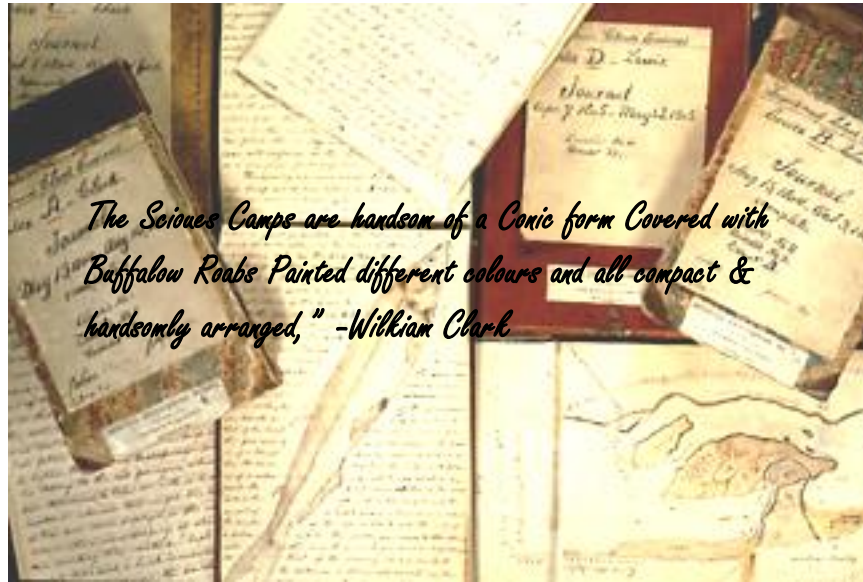
- 2** keep alive, free from harm
- 3** a bandit or desperado; used river bluffs as hideaways
- 6** Chief Standing Bear's tribe
- 7** river bluff rock material, _____
- 8** nesting site for terns and plovers
- 9** governing body to designate MNRR* in 1978, 1991
- 10** endangered sturgeon species in river
- 11** state where Missouri River headwaters is located
- 12** Missouri River navigation mode in the 1800s
- 15** raptors who build large nests in river cottonwoods

DOWN

- 1** 100-year NPS celebration in 2016
- 4** Missouri River is the longest on this continent
- 5** key ingredient in a river ecosystem
- 11** a bend in the river is called this
- 13** Missouri River nickname
- 14** Meriwether's counterpart

Lewis and Clark

Meriwether Lewis and William Clark first met the Yankton Sioux near present day Yankton, SD. They gathered for a ceremonial council at the mouth of the James River on Camp Calamet Bluff. In his journal on August 29, 1804 William Clark described the Yankton Sioux settlement on the river. *"The Scioues Camps are handsom of a Conic form Covered with Buffalow Roabs Painted different colours and all compact & handsomly arranged,"* He notes a teepee-populated village. Teepees, conical tents constructed out of painted buffalo skins, were a common sight near the mouth of the James River, but the first that the Corps of Discovery had encountered.



The Scioues Camps are handsom of a Conic form Covered with Buffalow Roabs Painted different colours and all compact & handsomly arranged," -William Clark

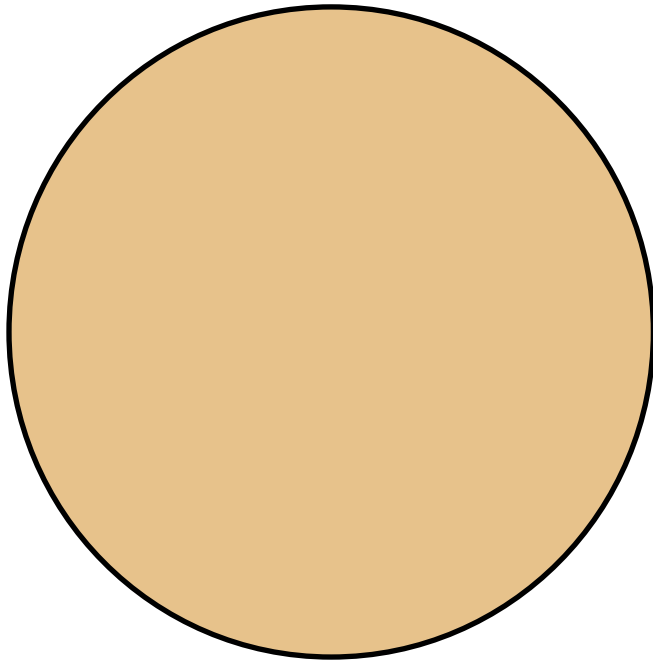
Journals have many uses today. Scientists, writers, actors, teachers, historians keep journals in their professions. Personal journals are fun to keep. You can write about your experiences, dreams, observations, joys or disappointments. Write about an experience you have had on the **Missouri National Recreational River** below. Draw a picture, too, if you want.

Corps of Discovery

Lewis and Clark packed 90 Peace Medals for their expedition. These medals of 3 different sizes were made of silver. On one side they depicted clasped hands and a crossed axe and ceremonial peace pipe. Also included was the phrase *Peace and Friendship*. On the other side was an image of President Thomas Jefferson who commissioned their trip. When the Corps of Discovery met the Yankton Sioux on the bluff overlooking the river, they gave the chief and his tribe several gifts including a large peace medal.



Think about symbols or pictures you have seen that represent peace and friendship. Design a peace medal of your own. Imagine one that could be traded with leaders around the world today to help strengthen friendships between nations and their people.



Endangered Species

Piping Plover



Pallid Sturgeon



Least Tern



Over 40% of the world's species are considered **endangered**, which means they could become **extinct**. The Missouri National Recreational River helps to protect two species that are designated as endangered and one that is threatened: piping plover, least tern and **pallid sturgeon**.

Research one of the endangered or invasive species in the MNRR. Formulate 4 research questions and then search for the answers to better understand why our park is protecting them.

Don't forget to name your sources.

Topic: _____

Question 1:

Question 2:

Question 3:

Question 4:

Sources—

Invasive Species

Over 6,500 non-native invasive species have been documented on park lands. **Invasive** species are plants, animals and pathogens that are non-native to an ecosystem. They are likely to cause harm to the ecosystems they invade. Two aquatic species that **threaten** the water and ecosystems of the Missouri National Recreational River are the zebra mussel and the Asian carp.

WHAT CAN BE DONE?

The National Park Service is working to protect and manage both endangered and invasive species respectively on park lands through partnerships with both national and local programs. One of the strategies is to conduct “boat checks” to help visitors make sure their boats are free of zebra mussels prior to entering the park. Many endangered species are relocated to a national park unit in order to stop their decline and to help them recover.



Zebra Mussel



Asian Carp

Hello, River Friends,

My name is Roscoe the River Otter, the mascot for the national park called Missouri National Recreational River.

I like the river because it has so many places for me to find food and have fun. We river otters love to swim and play in rivers, lakes, marshes and other watersheds. The Missouri River has nicknames like the **Big Muddy** and the **Mighty Mo**. It is a mighty nice place to me!



My home is usually a small burrow in the ground near the water. Sometimes I use a neighbor's abandoned home, or I dig a tunnel near the **limestone** banks of the river or lake. It is fun to slide down the chute and splash into the water. Sort of like you when you go to a water park. Plus, if I need a quick escape from a predator, I can swim into the tunnel for safety.

I am a good swimmer, too. My mother pushed me into the water when I was 2 months old and gave me my first swimming lesson. My slender body has a large tail that propels me underwater; I have webbed feet and a waterproof coat. My nostrils and ears close when I am submerged, and a thin membrane covers my eyes sort of like built in swimming goggles. I cannot breathe under the water, but I can hold my breath for 8 minutes.

Fishing is my specialty. I prefer trout, but also enjoy turtles, frogs, and crayfish. I usually hunt at night and have been known to sneak into a fish hatchery or pond, which doesn't make me a popular neighbor to some folks. My senses are very helpful especially smell, hearing and touch. My whiskers and paws are very sensitive. My teeth are also very important and quite sharp. While I admit I am pretty cute, I can be unfriendly if I feel threatened. It's all about survival, and my mother taught me to be resourceful!!

Have fun learning about my favorite national park, the Missouri National Recreational River.

Your Friend, Roscoe



Species: River Otter

Scientific Name - *Lontra canadensis*

Family: Weasel, Mustelid

Habitat: Permanent watersheds

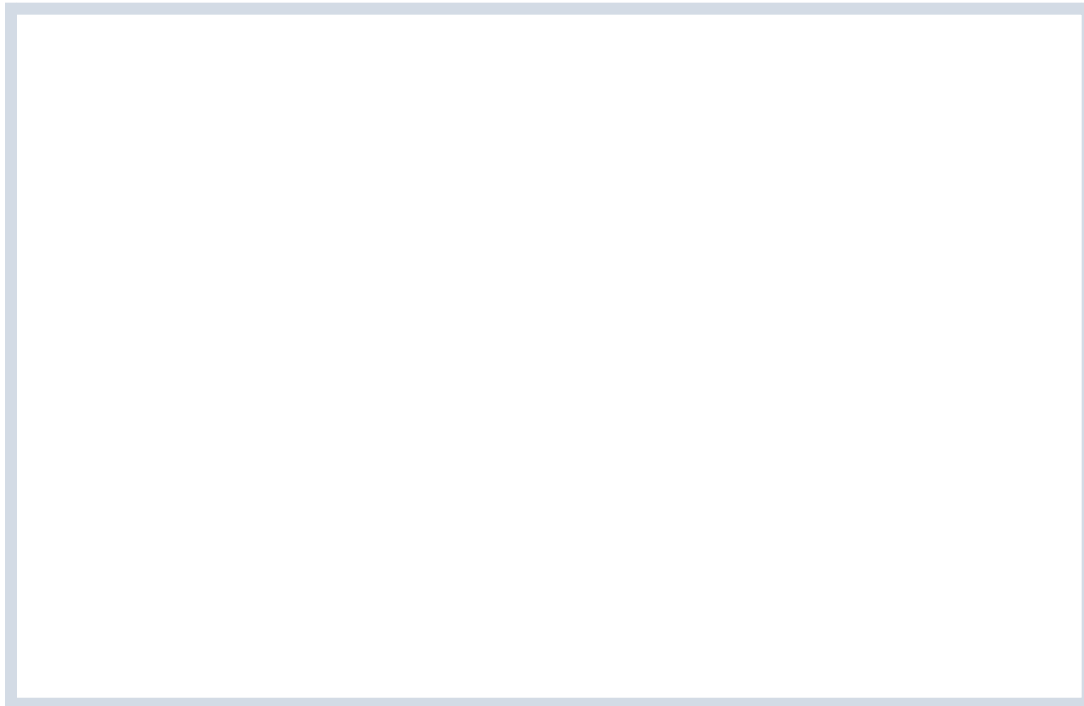
Threats: climate change, habitat destruction, limit food sources

Connect, Color, and Draw with Roscoe

Connect the dots and color in Roscoe.



Draw Roscoe a picture of your home or of you having fun at the river.



Roscoe's Cinquain

A cinquain is a five-line format poem that tells about one topic.

Directions: Finish Roscoe's poem about his home, the Missouri River. Lines 1 and 5 are done for you.

MNRR

(two descriptive words)

(three words ending in -ing)

(a four-word sentence)

Mighty Mo

MNRR: My Habitat, My Home

Tell Roscoe about your home and habitat!



I am from the state of _____.

The name of my town is _____.

The nearest national park is

_____ ***in the state***
of _____.

I enjoy where I live because

_____.

One of my favorite activities to do in my habitat
is _____

because _____.

A common bird where I live is the

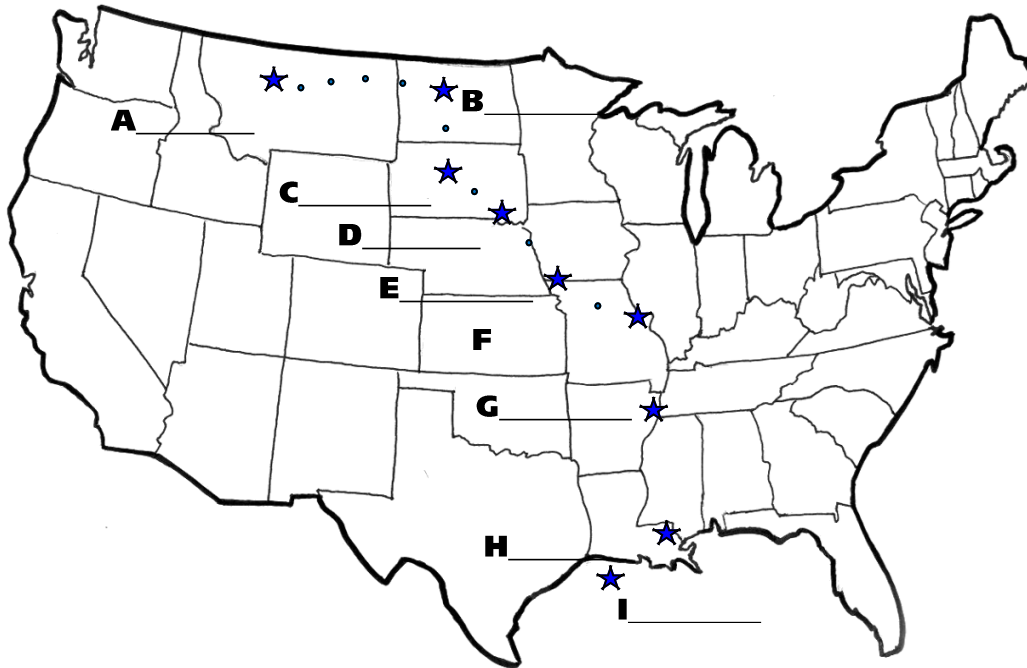
_____.

Two words to describe my homes are

_____ ***and*** _____.

Map of the Missouri

Connect the dots to trace the course of the Missouri River.



At what city do the Missouri and Mississippi Rivers meet?

How many states does the Missouri touch before it reaches St. Louis?

Is it 5, 6, or 7?

Can you name them all?

Chart the Channel

Write the names listed below on the map next to their corresponding letter to mark some key locations on the river. Then connect the points to show where the river flows to meet up with the Mississippi.

- A.** Three Forks, Montana
- B.** Bismarck, North Dakota
- C.** Pierre, South Dakota
- D.** Yankton, South Dakota
- E.** Kansas City, Missouri
- F.** St. Louis, Missouri
- G.** Memphis, Tennessee
- H.** New Orleans, Louisiana
- I.** Gulf of Mexico

The Missouri River is the longest river in _____ America.

It flows _____ miles from its headwaters in the state of _____ to its mouth at _____, Missouri.

Missouri National _____

River protects and **preserves** nearly 100 miles of this unique river from _____ Dam in South Dakota to **Ponca** State Park in the state of _____.

Fort Randall St. Louis

Nebraska North

Montana 2,341

Recreational

Wind at your stern. Ahead 2 spaces

Grazed a snag. Need to shore for repairs. Go back 2.



Load up a new supply of wood for boiler. Move ahead 4 spaces.

Steamboat Strategy

You made it!!

Run aground On a sandbar. Back 1 space

Steamboats were big ships made for the Missouri River. They were as long as four big tractor-trailer trucks parked end-to-end! They burned wood to make steam to run the engines. They carried passengers as well as cargo such as food and supplies for gold miners, settlers, soldiers and Indians.

A stop on a small island provides crew a day of food and rest. Move ahead 3 spaces.

A good tail wind helps to make up time. Ahead 4 spaces.

A violent storm delays you for 1 day. Back 1 space.

What skills and traits would be helpful to a steamboat captain?

Deep channel helps to avoid snags. Ahead 4 spaces

Boiler overheats. Repairs needed. Back 1 space.



Hit sandbar. Back 1

Bravo! Found the main channel. Ahead 4 spaces.



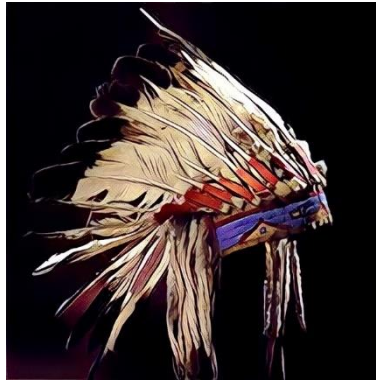
Find a small coin or pebble and use it to navigate the **meanders** of the river like a **steamboat**. Be aware of all the challenges you face as you try to reach your destination. Snags are old trees that hide under the water and can sink the boat. In shallow water, boats can get stuck on a **sandbar**.

Sometimes the boilers can explode if the crew adds too much wood. Safe travels!

Artifact Find

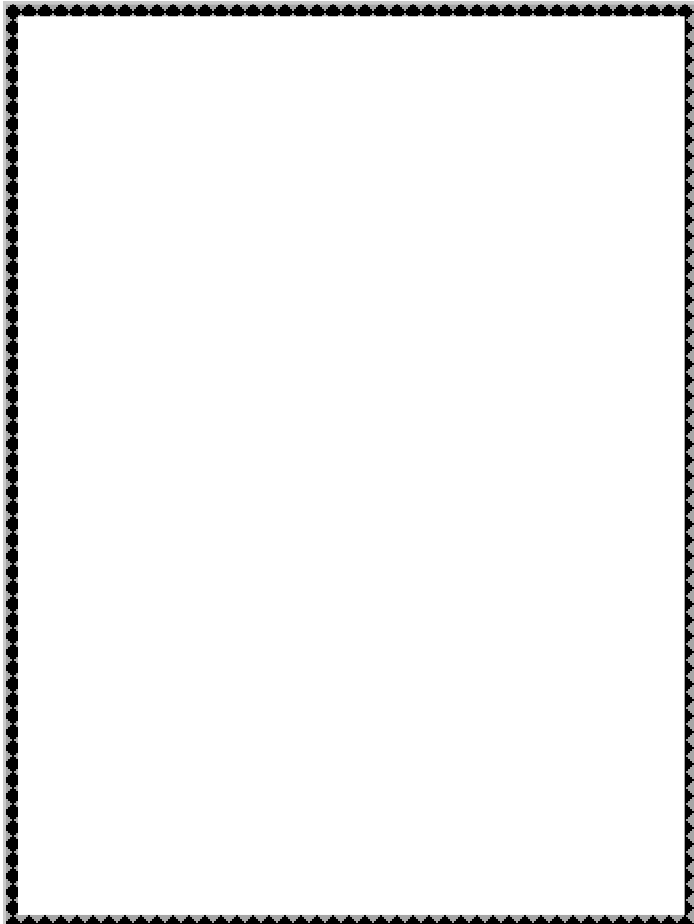
American Indians living along the Missouri River left items behind which archeologists call *artifacts*. Archeologists study people from the past and their day-to-day lives.

Artifacts are clues to help them understand how people lived and what they valued.



An Archeologist's View

Select an object from your home. Pretend you are an archeologist in the future who discovers this artifact. Sketch your object below and answer the questions.



What material is the object made of?

What is its texture or feel?

How much does it weigh?

How tall wide and long is it?

What shape does it have?

What do you "think" it was used for?

Using Your Senses



Deer have a highly developed sense of smell, sight and sound which help them avoid danger.

Dragonflies have compound eyes along with 3 other eyes known as ocelli to help them detect and react to motion.

Owls, like most birds of prey, can identify the tiniest of details. They use sight and sound to hunt their prey.

Explain which of your senses is the most important to you and why?

Use your sense of sight, sound, touch and smell to explore and experience the Missouri River. Sit quietly along the riverbank or on a scenic overlook. Take note of what your senses reveal.

I see the colors and shapes of:

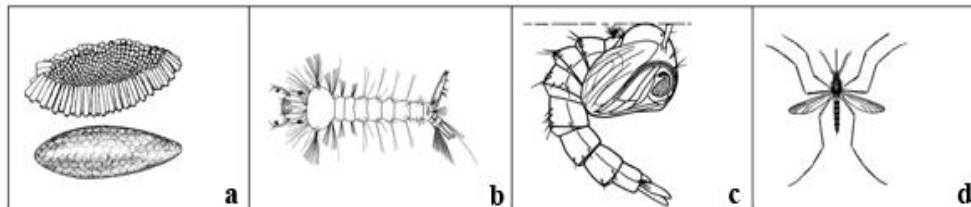
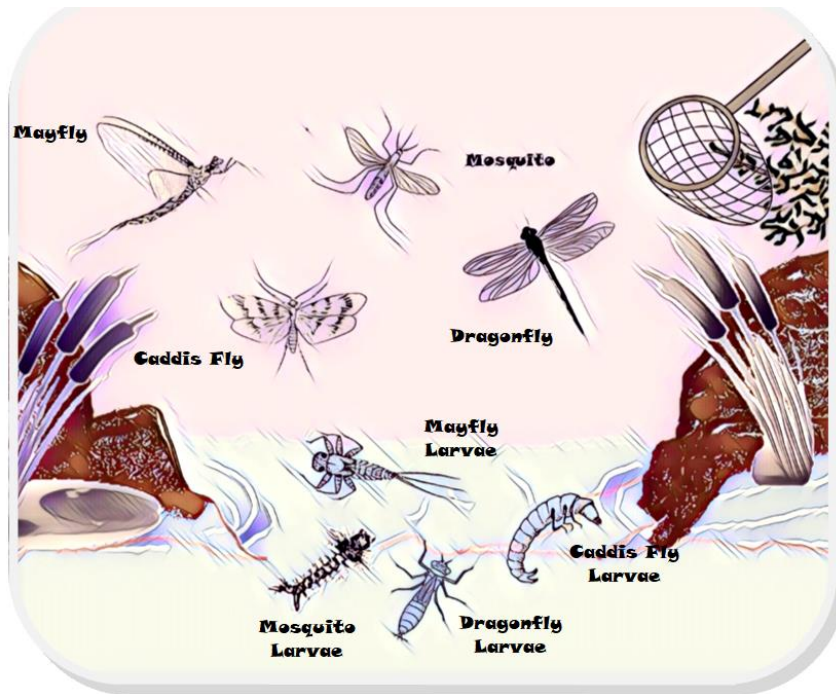
My nose smells:

I hear the sounds of:

Insect Connect

The **water** of the *Missouri National Recreational River* provides a healthy habitat for many insects during the stages of their lives. Draw a line to connect the adult insect to its larva in the picture below.

Circle any similar body characteristics in each.



The life cycle of a mosquito goes through 4 stages: (a) Egg, (b) Larva, (c) Pupa, and (d) Adult. Each of these stages can be easily recognized by its special appearance.

Nature is full of cycles. Can you think of another cycle that you know that occurs in nature?

Tell about it: Does it have stages? Explain what they are and what you know about them?

MNRR Habitat Match

Many different animals live in and along the river. Each one needs a different kind of home or habitat. **Draw a line from the animal to the place it lives.**



Eagle



Sandbar



Paddlefish



Prairie



Heron



River



Bison



Cottonwood Trees



Piping Plover



Wetland

Making Tracks

Directions: When you are out on a hiking trail along the Missouri National Recreational River you may discover that others have been on the same path. They leave tracks in the mud or the sand. Use the clues to help you decide whose tracks are whose. Using **Deer, Bison, Turkey, Coyote, Raccoon, Opossum**, and **Bull Frog**, write the name of the animal on the line below the clue.



I once roamed in large herds on the prairie and provided food and shelter to the American Indian tribes. _____



My three-pronged track tells you I am a bird, but my gobble is a sure give away that I am nearby. _____



I wear a little black mask and my eyes gleam at night. My bushy, striped tail makes a very nice hat. _____



I am a marsupial with a thumb-like appendage. Nighttime is my favorite part of the day. _____



I have a white tail and like to munch on trees and plants in the woods. _____



I am an amphibian and can take over a pond with my call and my size. _____



I am from the canine family and like to howl or yeip at night. _____