

Dinosaur National Monument



This Dinosaur Junior Ranger Book
belongs to _____

I am _____ years old (complete that many pages)

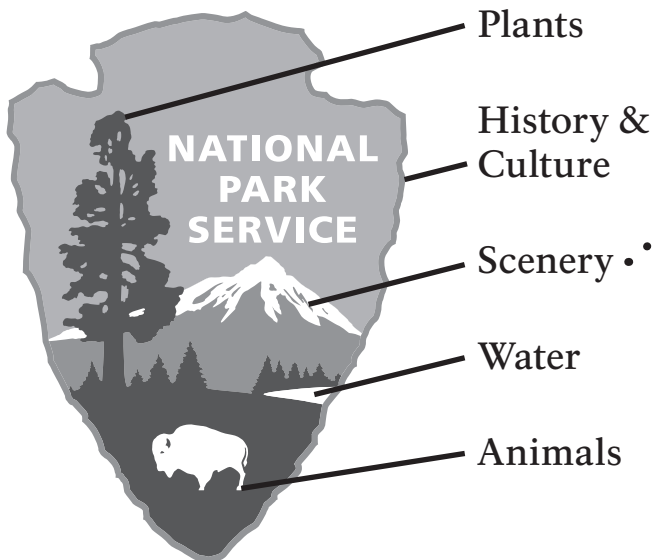


When your book is complete, have a ranger review it, recite the pledge and earn your badge:

As a Junior Ranger, I promise to protect the fossils, plants, animals and history of Dinosaur National Monument. I will explore safely, learn new things, and share what I learn with others.

What Is Important To Protect?

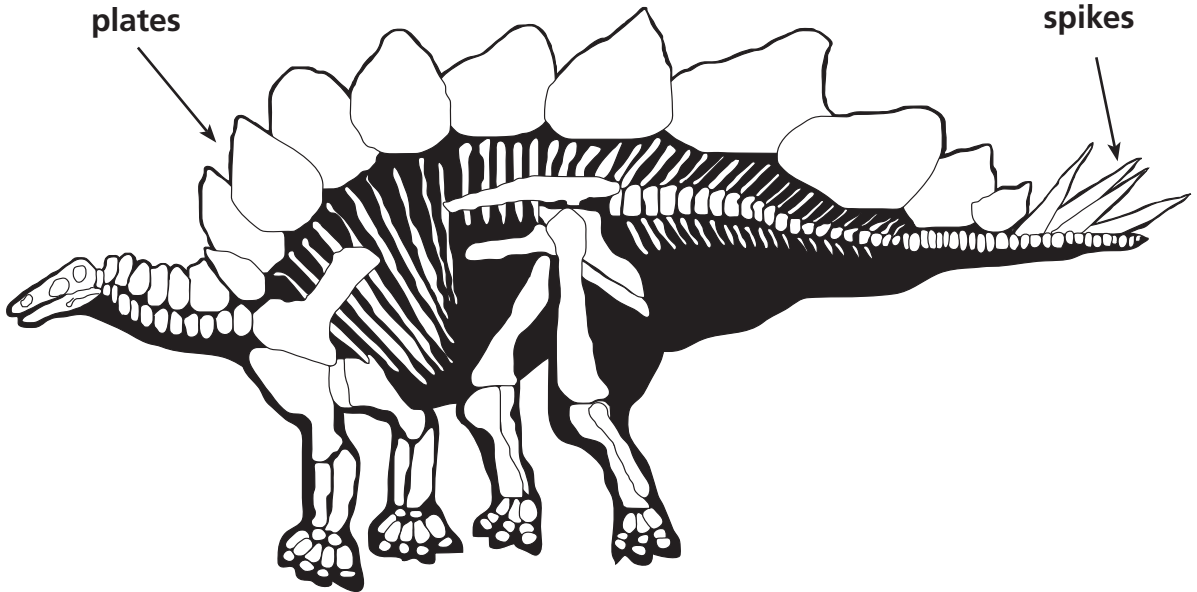
Dinosaur National Monument is one of over 400 special places protected by the National Park Service. The official symbol of the National Park Service (on the left) and the symbol of Dinosaur National Monument (on the right) have pictures inside that represent important things to protect. *Using the National Park Service symbol as an example, can you draw lines to match the words to the pictures in the Dinosaur symbol to show what is special and protected here?*



Draw your own symbol for a real or imaginary park:

What Makes Stegosaurus Special?

Paleontologists have discovered many dinosaur fossils here. Some of the parts look very strange, especially those from Stegosaurus. You can take your picture next to the Stegosaurus statue at the Quarry Visitor Center and find real fossils from this dinosaur in the Quarry Exhibit Hall. *Study the picture below and think of reasons for some of the unusual Stegosaurus body parts.*



Stegosaurus had big triangular plates on its back. What could they be for?

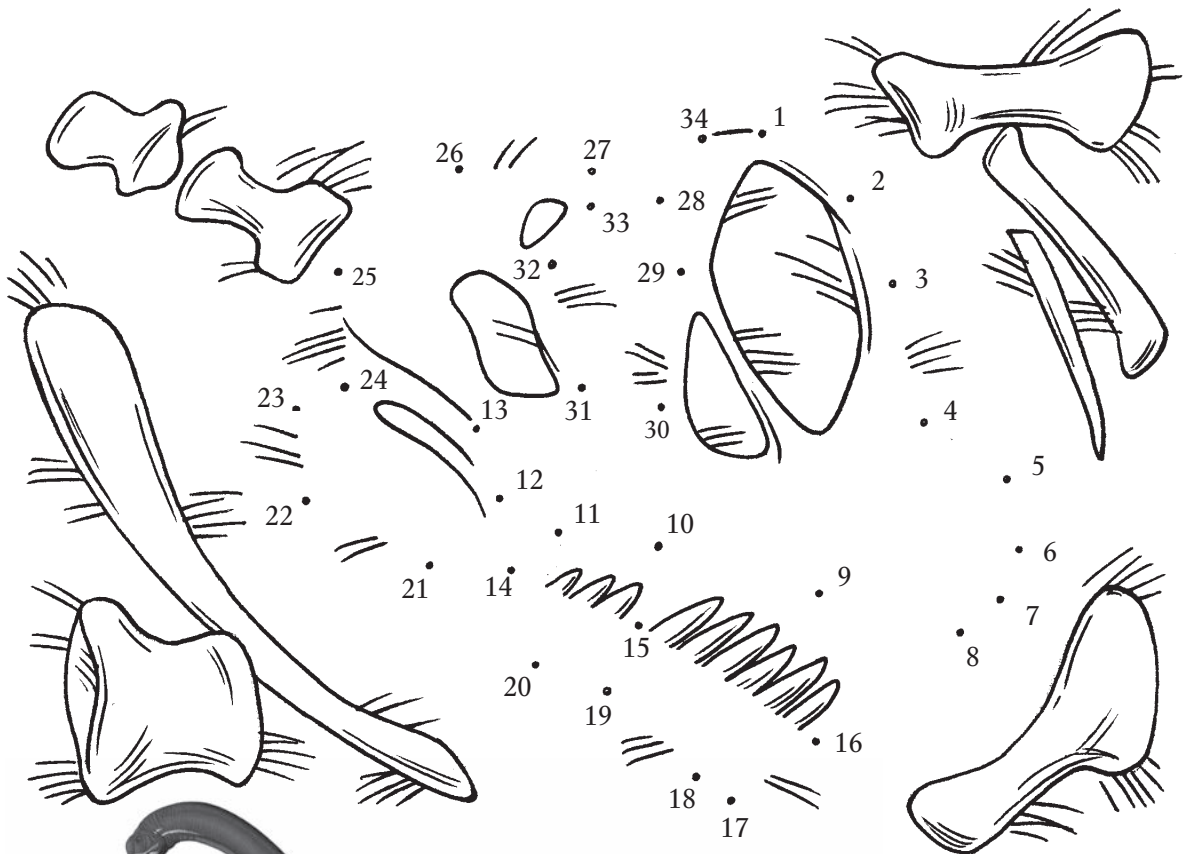
Why do you think Stegosaurus had spikes on its tail?

What clues could tell you if Stegosaurus was a meat eater or a plant eater?

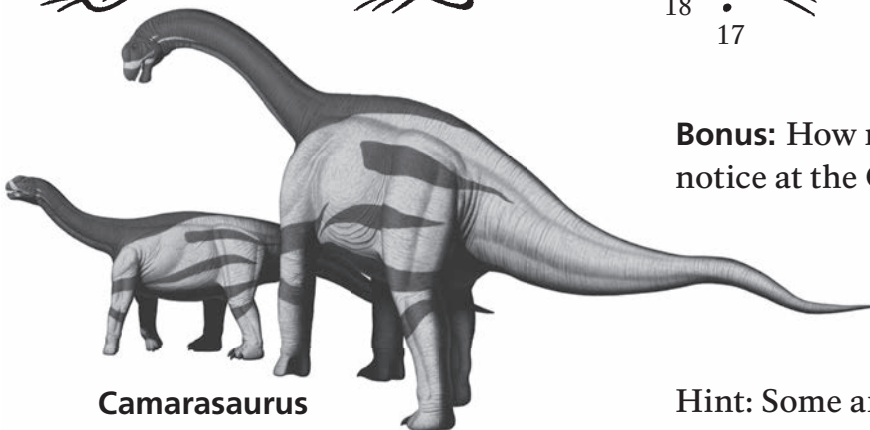
What question would you ask Stegosaurus if you had the chance?

Can You Find the Skull?

It is rare to find a skull. Skulls are more fragile than other kinds of bones, and they are not preserved as often as leg bones, ribs and vertebrae. *Connect the dots to find a dinosaur skull among the other bones in the drawing.*



Bonus: How many skulls did you notice at the Quarry Exhibit Hall?



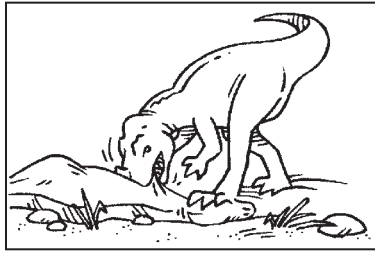
Camarasaurus

Hint: Some are in cases

How Did the Fossils Get Here?

These drawings tell a story about what has happened here, but they are out of order!

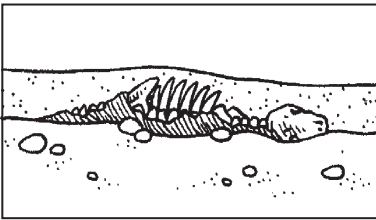
Number the events so they are in order, starting with living dinosaurs and ending with discovery of their fossils.



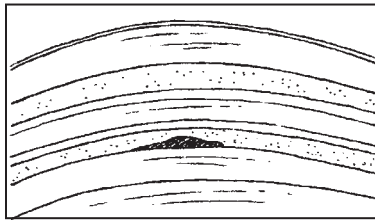
_____ A Ceratosaurus sneaks up and kills one of the Camptosaurus.



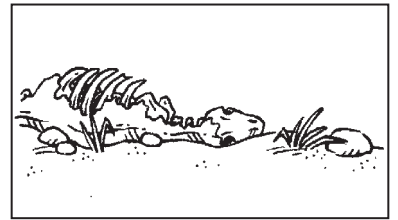
_____ Paleontologist Earl Douglass discovers dinosaur fossils in 1909.



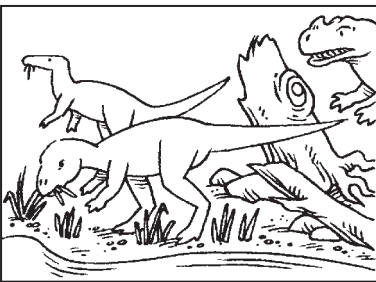
_____ A flood buries the carcass under sand and gravel that protect the bones from scavengers or more rotting.



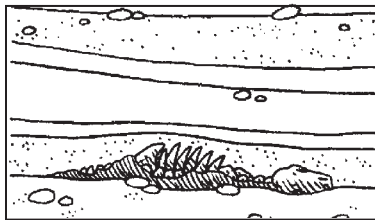
_____ About 65 million years ago, the once flat layers of rock were pushed up, forming an arch called an anticline.



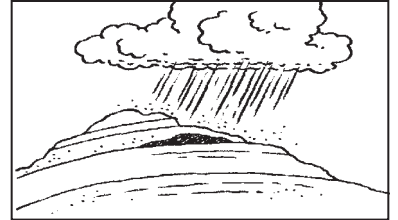
_____ Bacteria and fungi cause the soft parts of the Camptosaurus carcass to rot, returning nutrients to the soil as it decays.



_____ About 150 million years ago a group of Camptosaurus feed on plants along the river.



_____ Many layers of sediment build up and eventually become sedimentary rock. Minerals enter the bones, turning them into fossils.



_____ Rain and wind erode layers of rock from the top and sides of the anticline. The layer with the dinosaur fossils is at the earth's surface again.

What Do Dinosaur Names Tell Us?

Many names for dinosaurs are made of Greek or Latin words. For example, the word dinosaur comes from the Greek word *dino*, which means *terrible*, and the Greek word *saurus*, which means *lizard*.

Dinosaurs are not actually lizards, they are a group of reptiles that dominated the land during the Mesozoic era, between 225 and 65 million years ago. Most of the dinosaurs found as fossils here lived during the Jurassic period, around 150 million years ago.



Use words from the list to make up a dinosaur name.

What is your imaginary dinosaur name?

What does that name mean?

acantho = spiny
allo = other
apato = deceptive
avis = bird
baga = little
baro = heavy
camara = chamber
campto = flexible
cephalic = head
ceras = horn
cory = helmet
dino = terrible
diplo = double
docus = beam
dryo = tree
giga = savage giant
hadro = large
kentro = sharp point
lopho = crest
nano = very small
nodo = lumpy
odon = tooth
onyx = claw
pachy = thick
pedi = foot
saurus = lizard
stego = roof
torvo = savage
urus = tail
xeno = strange



Allosaurus means:



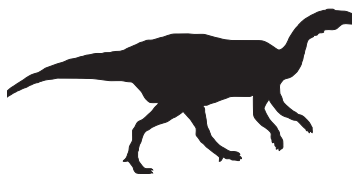
Apatosaurus means:



Barosaurus means:



Camarasaurus means:



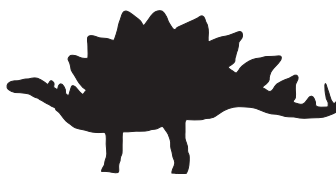
Camptosaurus means:



Diplodocus means:



Dryosaurus means:



Stegosaurus means:



Torvosaurus means:

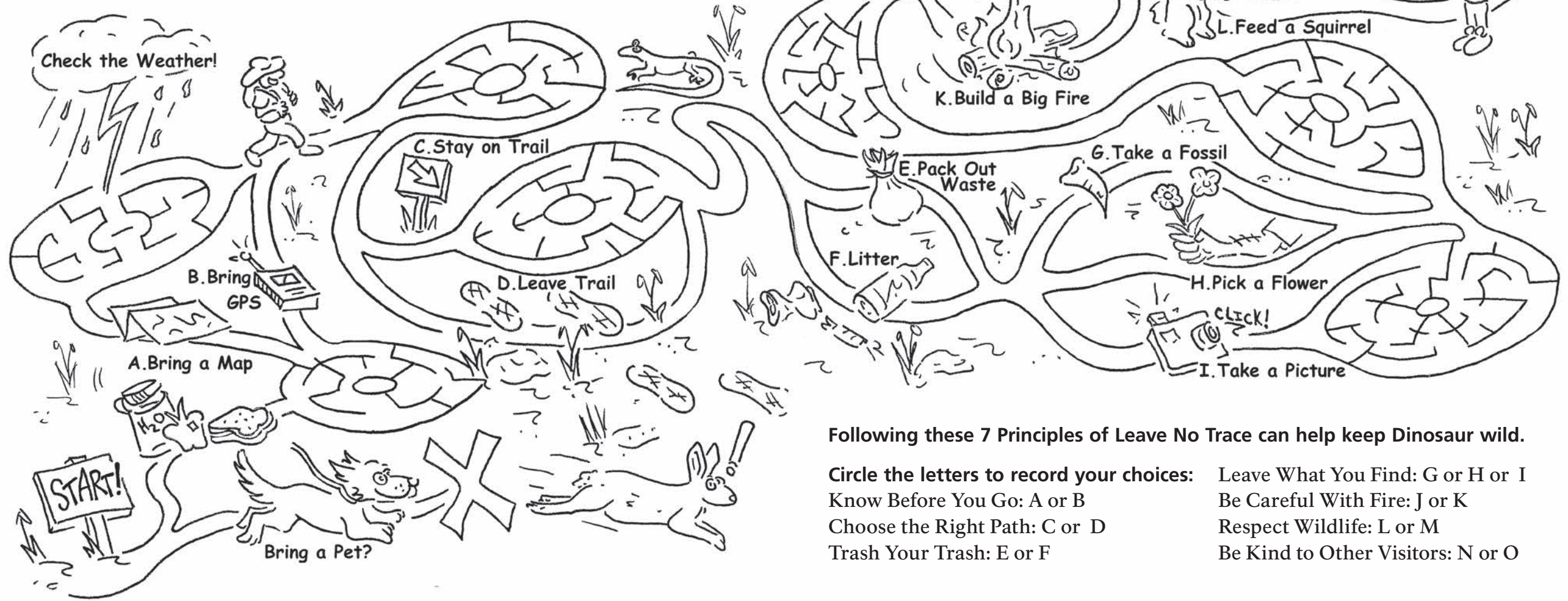
Use the list to write the meaning of each name under each dinosaur's picture.

Bonus activity: Can you find each of these dinosaurs in the mural at the Quarry Exhibit Hall? *Put a star by each dinosaur you find.*

Can You Visit Without a Trace?

When you visit special places like Dinosaur, every plant, animal, rock and historic structure needs to stay in place, just as you found it. Few areas in the United States still have large areas of wilderness where natural cycles exist without big changes from human use. Dinosaur is one of those special places.

You can help keep wilderness areas wild when you are exploring. Choose the right things to bring, decide what to leave behind, and make good choices along the way. *Journey through the maze to see how well you can find and follow the Seven Principles of Leave No Trace.* (c) Leave No Trace Center for Outdoor Ethics: www.LNT.org



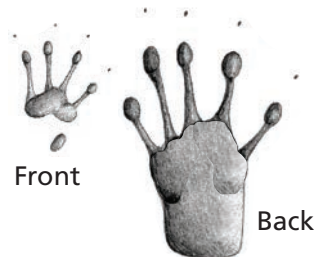
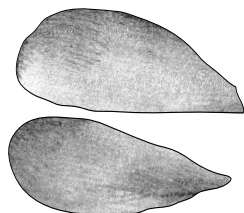
Following these 7 Principles of Leave No Trace can help keep Dinosaur wild.

- Circle the letters to record your choices:
- Know Before You Go: A or B
 - Be Careful With Fire: J or K
 - Choose the Right Path: C or D
 - Respect Wildlife: L or M
 - Trash Your Trash: E or F
 - Leave What You Find: G or H or I
 - Be Kind to Other Visitors: N or O

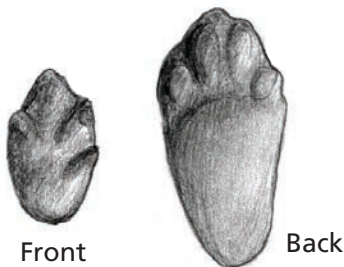
Animal Track Match-up (not actual size)

Animal feet (and their tracks) come in many different shapes and sizes.

Use the descriptions below to identify and label these tracks.



Prairie Dog



Rabbits have small front feet and large back feet. When they run, their back feet land in front.

Prairie Dogs are very common in this area. Their tracks look like little handprints.

Bobcats have 4 toe pads and rounded prints. Retractable claws don't show up in tracks.

Mule Deer have hooves split into two parts. Their tracks are almost heart shaped.

Coyotes have 4 toe pads and rectangular prints. Their tracks often show claw marks.

Eagles have four toes (3 front, 1 back) and long talons (claws) that they use to catch their food.

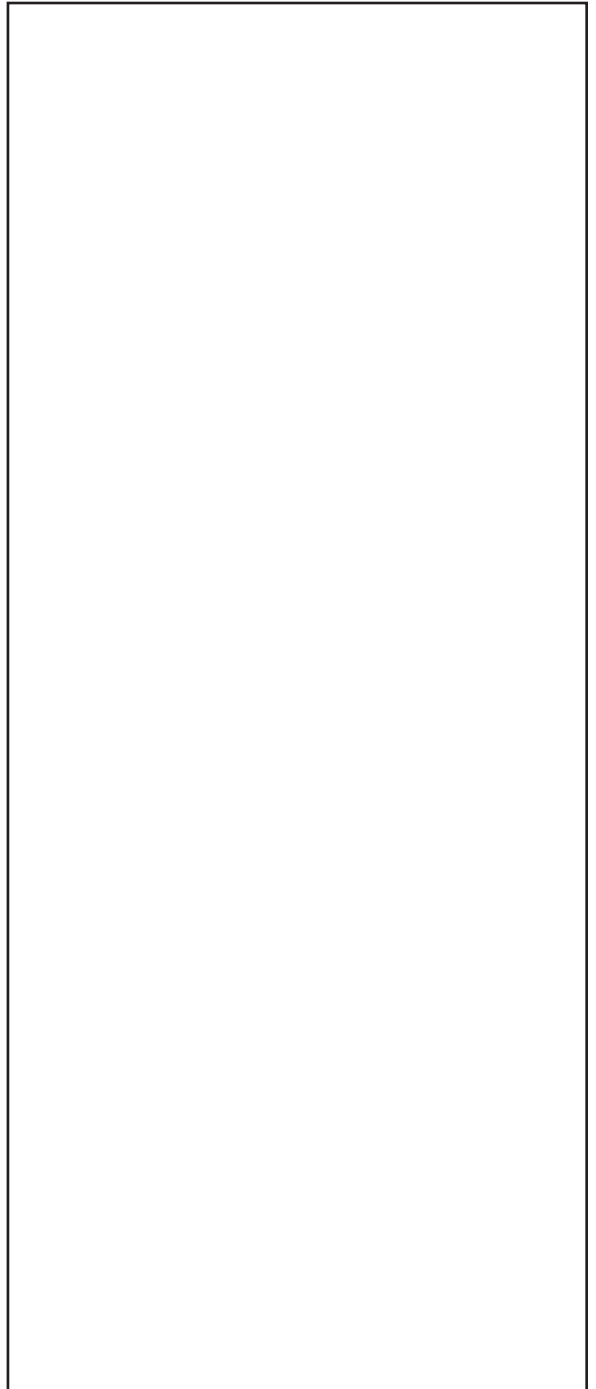
What Clues are Found in Animal Tracks?

Animals tracks tell a story. Patterns of tracks can show what kind of animal was there, how fast it moved, and what direction it was traveling. A pattern of tracks is called a trackway.

What clues in a trackway could tell you if an animal was walking, running, or hopping? Hint: have friends walk, run and jump and imagine the trackways they would leave.

Find a trackway (sandy or muddy places are best) and draw the pattern you see.

Write what you think this animal was doing. If you can't find any tracks on the ground, use your imagination to draw a trackway and describe it.



What Have You Discovered Here?

Do you think of yourself as more of an artist, more of a scientist, or both? To be a good scientist, or a good artist, you need to observe the world around you with as many of your senses as possible. You also need to find ways to share what you see, hear, smell and feel with others. *Find a place to make some observations. Use pictures or words to describe what you find.*

A large, empty rectangular box with a thin black border, occupying the lower two-thirds of the page. It is intended for students to draw or write their observations and discoveries.

Do Our Decisions Matter?



Choices we make today will impact the future. In the 1950s, people had to decide if they wanted to have a dam in part of Dinosaur National Monument or not. The dam would have flooded Echo Park and made parts of the Green and Yampa river canyons into a large reservoir.



There were many arguments both for and against the dam. Eventually, the choice was made to keep dams out of Echo Park. *Use your imagination to describe how the endangered humpback chub, a whitewater rapid, or a river-side cottonwood tree might respond to this choice if it could speak for itself:*

Who Lived Here First?

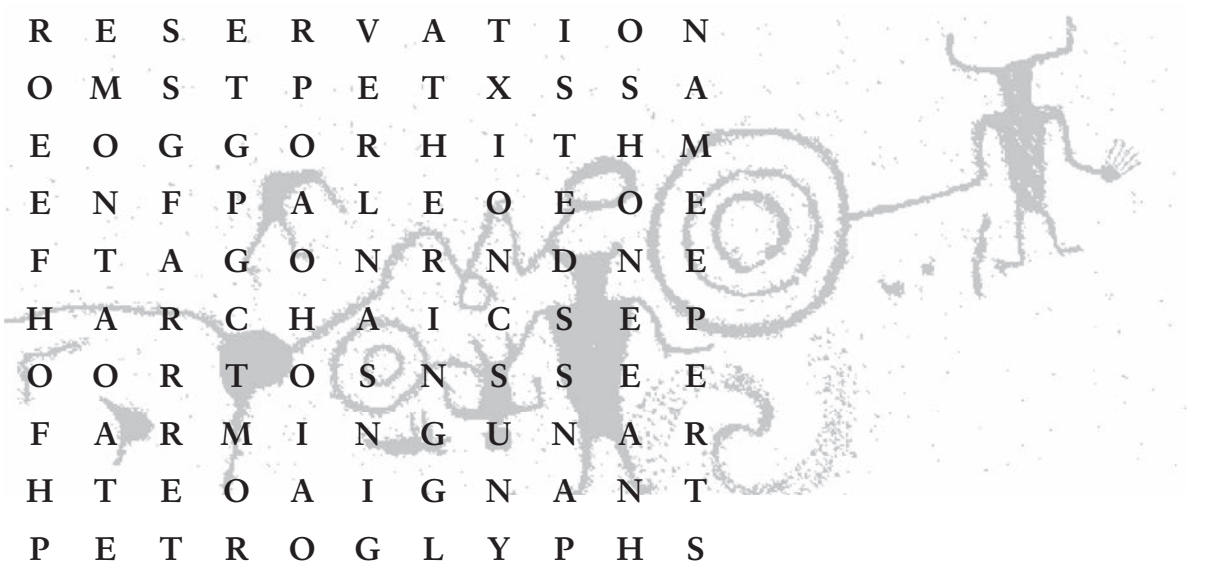
Dinosaur National Monument has stories of people and different cultures that **EXISTED** here for thousands of years. The **PALEO** Indian culture hunted big animals 9,000 years ago. When the climate became drier about 6,000 years ago, the Paleo Indians had to change the way they found food. They began to hunt for smaller animals and started **GATHERING** seeds, roots and nuts. Desert **ARCHAIC** is the name given to this culture.

1,000 years ago, a new group of people arrived called the **FREMONT**. They were known for **FARMING** corn, beans, and squash. The Fremont created many designs on the rocks that we can still see today. Rock carvings are called **PETROGLYPHS** and rock paintings are called pictographs.

When European explorers and settlers first entered this area in 1776, it was the home of the **UTE** and **SHOSHONE**. By the 1880s, Utes in this area were forced onto a **RESERVATION**. Traditional dances, songs and stories remain an important part of Ute culture today.

R F R U F E A T E S T
N R E T M O G S X H O
R E S E R V A T I O N
O M S T P E T X S S A
E O G G O R H I T H M
E N F P A L E O E O E
F T A G O N R N D N E
H A R C H A I C S E P
O O R T O S N S S E E
F A R M I N G U N A R
H T E O A I G N A N T
P E T R O G L Y P H S

Find the **BOLD WORDS** from above in the word search.



How Did Pioneers Survive?

Homesteading is an important part of the human history in this area.

Josie Bassett Morris homesteaded along Cub Creek from 1913 to 1964. *Learn more about Josie by completing the crossword puzzle with these words:*

pond chickens cub vegetables hip hogs

DOWN

1. Josie ate well all year long because she grew and canned many _____.

5. Living alone was risky for Josie. She broke her _____ when her horse knocked her down on frozen ground when she was 89 years old.

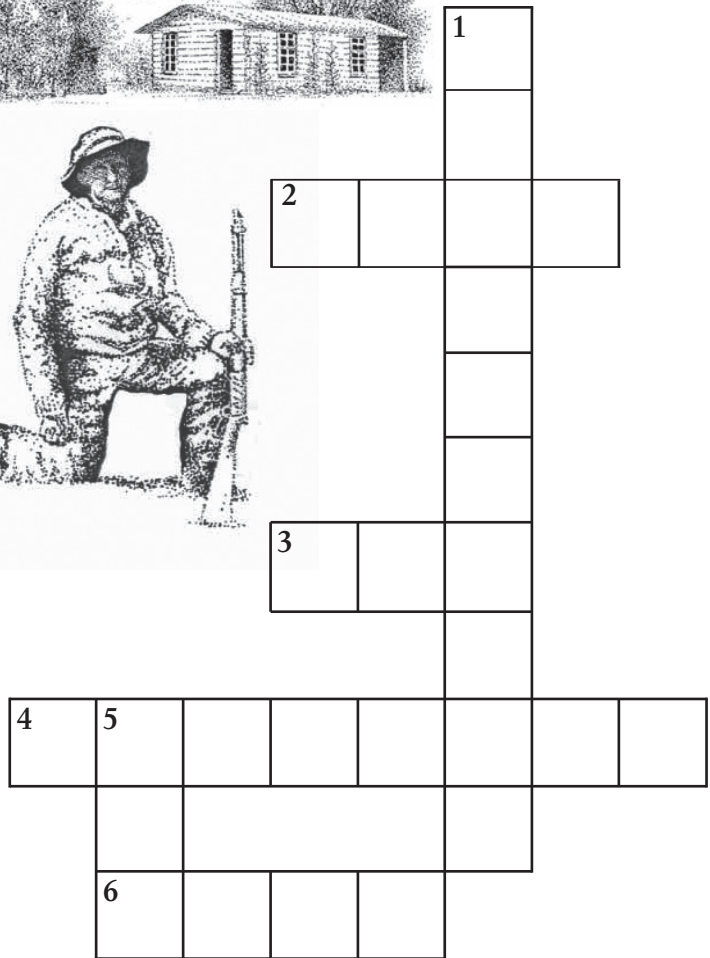
ACROSS

2. The two box canyons provided perfect natural corrals for Josie to raise _____.

3. _____ Creek runs by Josie's homestead.

4. Josie raised many different types of animals including _____ which supplied her with lots of eggs.

6. Water from the Box Canyon spring was captured into a _____, which served as a swimming hole and stored water for irrigation.



What Can You Find at Dinosaur?

There are lots of things to do and see here as a Dinosaur Junior Ranger.

The Utah side has tons of cool dinosaur fossils and the Colorado side has wild river canyons. Plants, animals and many people through time have made their homes here. *As you explore, circle what you find. Get four in a row for a bingo!*



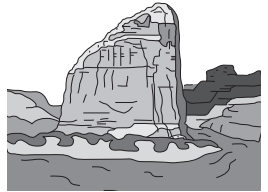
Dinosaur Skull



Animal Track



Petroglyph



Steamboat Rock



Juniper Tree



Ranger



Beetle



Ant



Raven



Magpie



Dinosaur Leg Fossil



River Boat

Free Space - Draw
Your Own Discovery!



Rabbit



Homestead



Sagebrush

My favorite thing at Dinosaur National Monument is:
