Dinosaur

National Park Service
U.S. Department of the Interior

Dinosaur National Monument

Junior Paleontologist Activity Book

This book belongs to: _____

Age: _____ Date: _____

4/08

National Park Service
U.S. Department of the Interior

Dinosaur National Monument
4545 Highway 40
Dinosaur, Colorado 81610
(435) 781-7700
www.nps.gov/dino

Junior Paleontologist Pledge

"As a Dinosaur National Monument Junior Paleontologist, I promise to learn about fossils, to help care for them, and to help care for my surroundings."

To learn more about the online National Park Service Junior Ranger program, visit www.nps.gov/webrangers.

EXPERIENCE YOUR AMERICA

Explore, Learn, Protect

Be a Junior Paleontologist!

How do I become a Junior Paleontologist?

① Complete the number of activities for your age group.

Ages 4-6: Complete at least 4 activities. Look for the Diplodocus symbol at the top of the page!

Ages 7-9: Complete at least 6 activities. Look for the Stegosaurus symbol at the top of the page!

Ages 10 and older: Complete at least 8 activities. Look for the Allosaurus symbol at the top of the page!

② Attend a ranger-guided program, such as a walk, talk, or evening program, or view one of the video programs at a visitor center. Ask the ranger to sign this form:

I certify that _____
(Junior Paleontologist's name)

has attended this program: _____
(name of program)

_____
Park Employee Signature Date

③ Once you complete your activities, present your book at either visitor center. You will then take the Junior Paleontologist Pledge and be issued your Junior Paleontologist badge.

Dinosaur National Monument

THIS IS TO CERTIFY THAT

_____

IS GRANTED THE TITLE OF

JUNIOR PALEONTOLOGIST

AWARDED THIS _____ DAY OF _____ IN THE YEAR _____.

_____
Park Ranger Signature

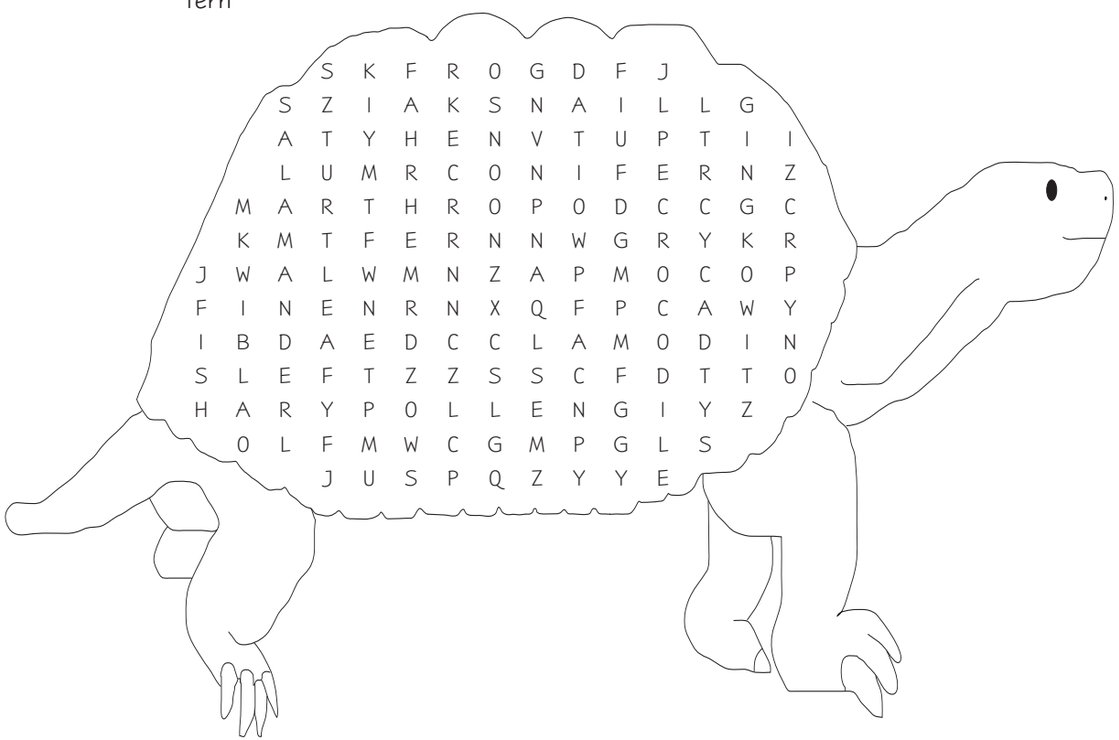
_____
Junior Paleontologist Signature

More Than Dinosaurs

Dinosaurs are not the only fossils found at Dinosaur National Monument. Paleontologists study these other fossils to learn about past environments. Numerous fish scale fossils indicate that the area was an ocean at one time. Frog and salamander fossils indicate that at another time, the area had fresh water streams and ponds. By examining these other fossils, paleontologists can find out about the environment in which dinosaurs lived.

Find the different types of fossils found in the Monument in the word search.

turtle
pollen
fish
cycad
fern
clam
frog
snail
conifer
crocodile
salamander
conifer
arthropod

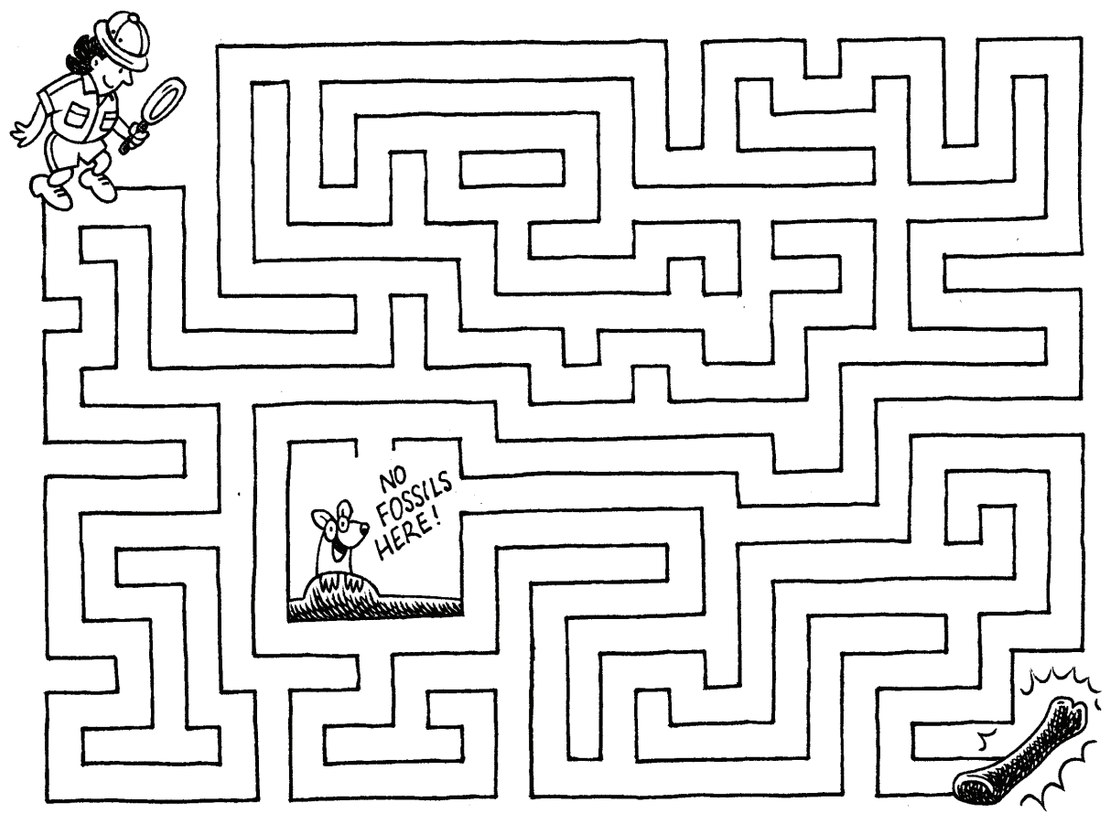


Paleontologists: Fossil Finders

A paleontologist is someone who studies fossils. Fossils are not easy to find. They can only be found in the right kind of rock, such as the Morrison Formation. Paleontologists have to know where to look, and they also have to be a little lucky!

Paleontologist measuring arm bones of a dinosaur.

Complete the maze to help the paleontologist find the fossil!

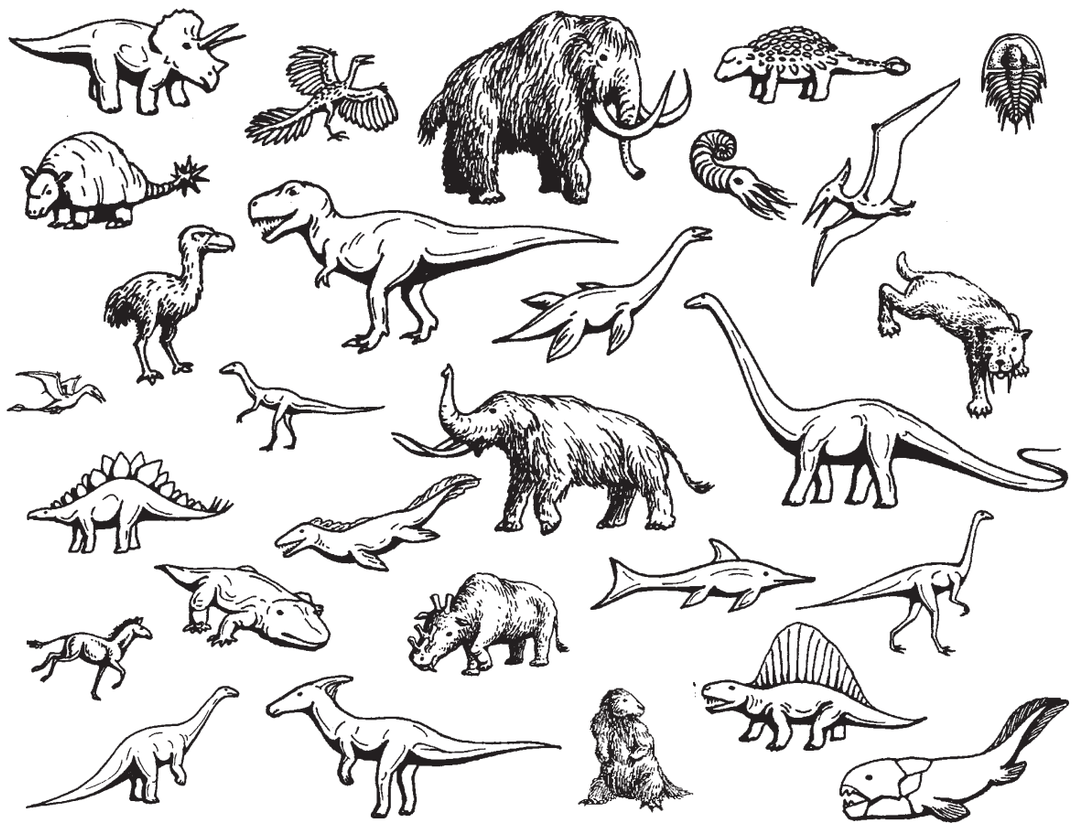


What is a Dinosaur?

Not every animal that lived a long time ago was a dinosaur. So, what is a dinosaur?

- Dinosaurs lived only in a time called the Mesozoic Era, 225 to 64 million years ago.
- Dinosaurs were a type of animal called reptiles.
- Dinosaurs lived only on land (reptiles that lived in the water or that flew in the sky were not dinosaurs).

Circle the dinosaurs among all the different prehistoric animals.



Dinosaur Trivia

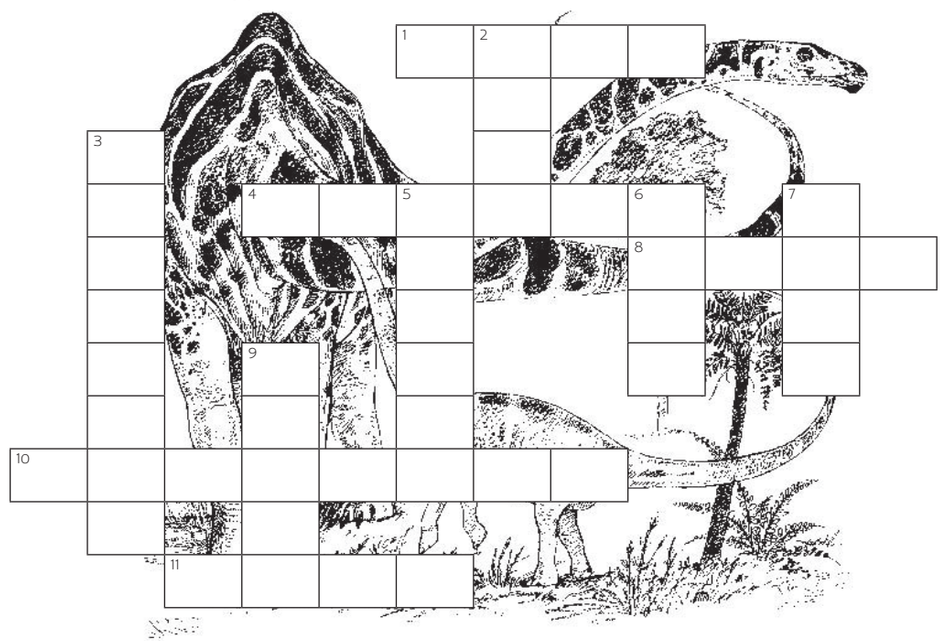
Test your knowledge of dinosaur trivia by completing the crossword puzzle.

Across

1 Dinosaurs with sharp teeth ate ____
4 Evidence in rock of past life
8 ___ Douglass was the first to quarry bones in this area
10 The dinosaurs found in the Carnegie Quarry are from this geologic period
11 Apatosaurus had a long ___

Down

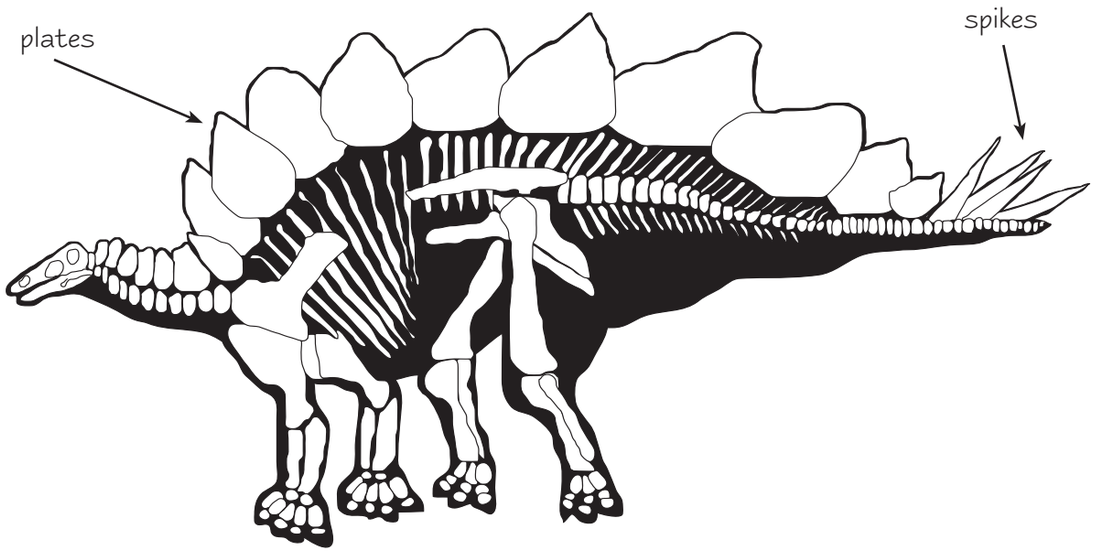
2 Dinosaurs hatched from ____
3 It means "terrible lizard"
5 Stegosaurus had ___ on its tail
6 Allosaurus walked on two ___
7 Dinosaur fossils have been found on every continent - True or False
9 Dinosaur tracks are a type of ___ fossil



What Was That For?

Paleontologists have discovered many dinosaur fossils. But since most of these fossils are bones and pieces of bones, paleontologists can only guess what the dinosaurs actually looked like. Paleontologists look at the bones and try to figure out how dinosaurs used their body parts to do certain things.

Stegosaurus has some unusual body parts. Study the picture below and help the paleontologist figure out how the Stegosaurs used these body parts.



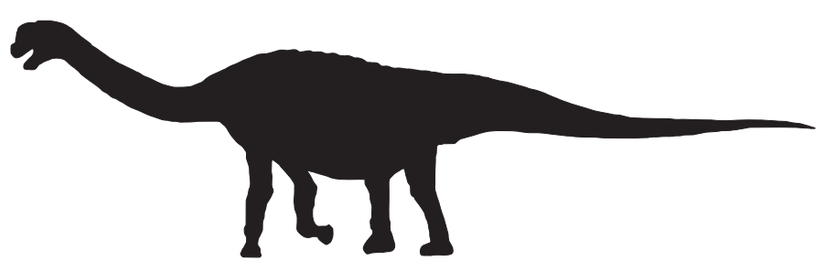
How do you think the Stegosaurus used the plates on its back?

How do you think the Stegosaurus used the spikes on its tail?

Find a Fossil

It is very rare to find a skull. Skulls are more fragile then other kinds of bones, and they are not preserved as often.

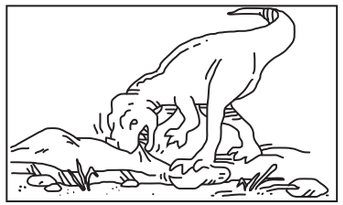
Can you find the dinosaur skull among the other bones in the drawing?



A River into the Past

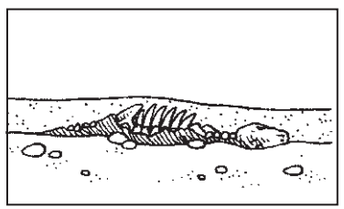
The drawings on this page tell a story about what has happened at the Monument. The problem is they are not in the right order!

Put the following events in order, from living dinosaurs to the discovery of their fossils.

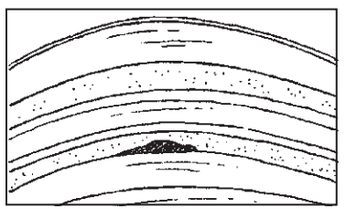


_____ The Ceratosaurus kills one of the Camptosaurus.

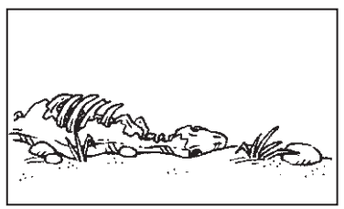
_____ In 1909, paleontologist Earl Douglass discovers bones of a dinosaur. He sends many tons of fossils back to the Carnegie Museum in Pittsburgh, Pennsylvania.



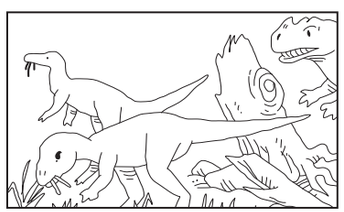
_____ The river floods and buries the carcass under sand and gravel. This burial protects the bones from scavengers or weathering.



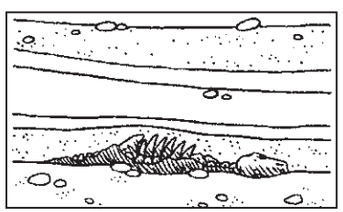
_____ About 65 million years ago, the flat layers of rock begin to be pushed up, forming an arch of rock layers we call the Uinta Mountains today.



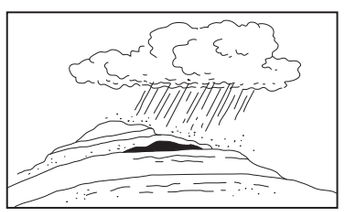
_____ Bacteria and fungi cause the soft parts of the body to rot and return the nutrients to the soil.



1 A group of Camptosaurs are feeding on plants along the river. A Certosaurs sees the group and sneaks up.



_____ Sand, mud, and volcanic ash buries the Camptosaur bones deeper and deeper. Minerals enter the bones making them turn into fossils.

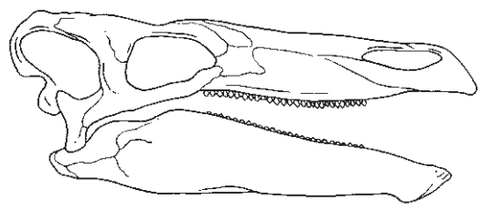


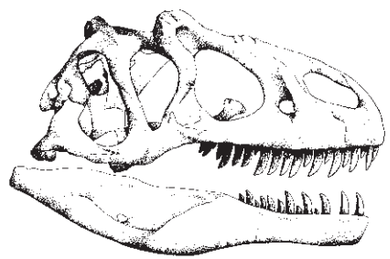
_____ Rain and wind strip younger layers of rock from the top and sides of the mountain, exposing the older, fossil-bearing layers of rock.

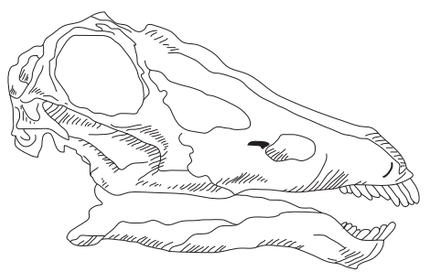
Dinner is Served

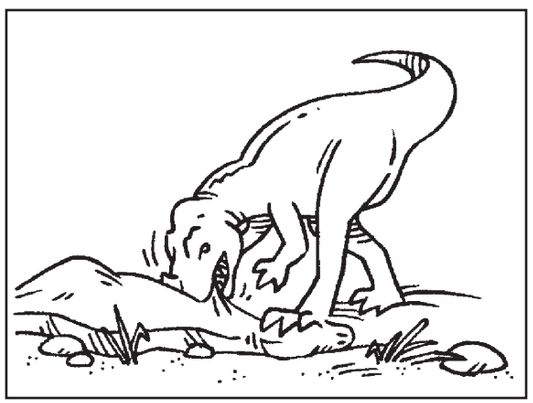
A skull can tell paleontologists a lot about the dinosaur. One thing the teeth can tell them is whether the dinosaur was a meat eater or a plant eater. If the teeth are long and pointed, then the dinosaur probably ate meat. If the teeth are flat or blunt, then the dinosaur probably used them to eat plants.

Draw a line from the skull to the type of food the dinosaur ate.





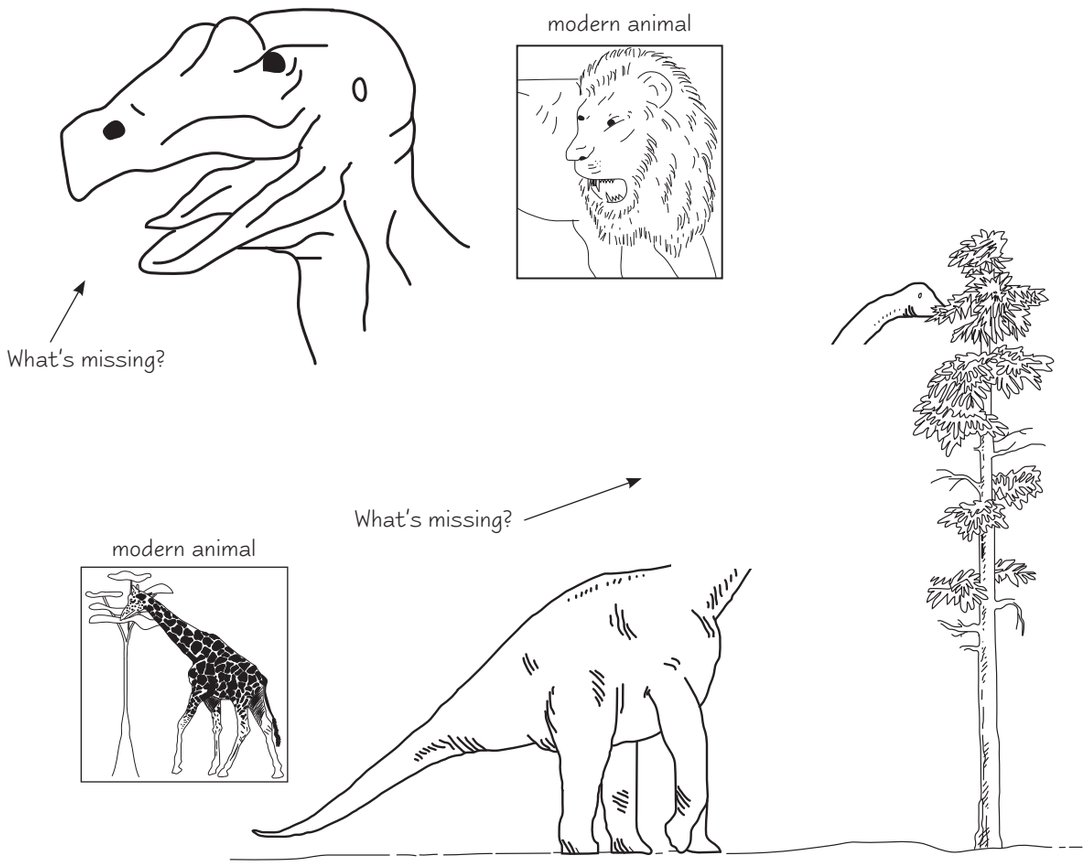




Pieces of the Puzzle

Fossils are evidence of past life. If you find a fossil, do not remove it or collect it. Each fossil is a piece of the story that helps paleontologists understand the past. By removing it from the location it was found, a piece of that story is lost. Dinosaur National Monument protects everything in the park, including fossils. By protecting the animals, rocks, plants, rivers, fossils and other objects, scientists are able to come here to learn more about current and past environments.

Each fossil is like a piece of a puzzle. Once the puzzle is put together, paleontologists can see a picture of what a dinosaur looked like. Sometimes it is hard to find all the pieces, so paleontologists guess what the missing pieces looked like based on animals we know today. Help draw in the missing pieces of the dinosaur by looking at a modern animal that is similar.



What Is a Fossil?

A fossil is any evidence of past plant or animal life that is preserved in the rock. Fossils are divided into two different types, body fossils and trace fossils.

Body fossils are the remains of plants and animals. Body fossils include things like leaves, bones, and shells.

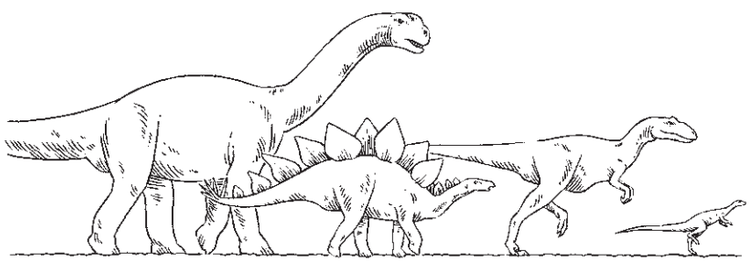
Trace fossils record the activities of animals in the rock. Trace fossils include things like footprints and coprolites (fossilized dung).

In the picture below, draw a circle around the **body fossils** and draw an X on the **trace fossils**.

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." Therefore, "dinosaur" means "terrible lizard."

Use the key on the right to find out what some names of the dinosaurs found at Dinosaur National Monument mean. Write the dinosaur name meaning under the picture of the dinosaur on the opposite page.



Choose words from the key to make up a dinosaur name.

What is your imaginary dinosaur name?

_____

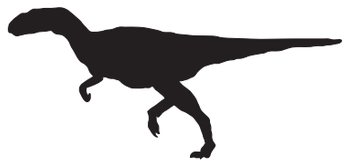
What does that name mean?

_____

_____

Key:

acantho = spiny
allo = other
apato = deceptive
avis = bird
baga = little
baro = heavy
camara = chamber
campto = flexible
cephalic = head
ceras = horn
cory = helment
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

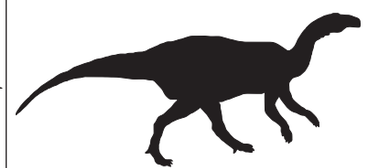


What does Allosaurus mean?

What does Apatosaurus mean?

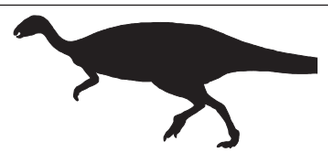
What does Barosaurus mean?

What does Camarasaurus mean?



What does Camptosaurus mean?

What does Diplodocus mean?



What does Dryosaurus mean?

What does Stegosaurus mean?

What does Torvosaurus mean?