



EDUCATION GUIDE

ERTH'S DINOSAUR ZOO



Monday, October 31, 2016
9:30am and 12:30pm

Tickets: \$6.50 per person

Recommended for Grades 2 through 6

ABT Student Matinee series sponsored by



Alberta Bair Theater for the Performing Arts
2801 Third Avenue North • Billings, Montana 59103
406-256-8915

www.albertabairtheater.org

ABOUT EARTH

Erth Visual & Physical, Inc. is a highly creative 'visual and physical' theatre company based in Sydney, Australia. Since its beginnings in 1990, the company has created installations, site specific productions, performance artistry, and original live theatre — always striving to provide audiences with eye popping visual experiences.

Giant puppetry, stiltwalkers, inflatable environments, aerial and flying creatures: Erth is all these things, and more. They have built an Australia-wide, and increasingly international reputation based on their exceptional work. Erth inspires audiences with their unique and dynamic vision.

INTRODUCTION TO THE TIME OF DINOSAURS

Between 230 and 65 million years ago, some of the most amazing creatures ever to have lived, ruled our planet. The most successful of these creatures were a group of terrestrial reptiles called dinosaurs. Not all the dinosaurs lived at the same time, nor did they all live in the same part of the world, but they existed on the earth for over 165 million years.

Terrestrial: living on land rather than in the sea.

No other single group of animals has been dominant on earth for such a long period of time. It can be difficult to imagine just how long they dominated, but we can try to understand by comparing the era of dinosaurs to human existence: The earliest known human genus evolved on earth about 2.4 million years ago and modern humans (*Homo Sapiens*) only originated about 200,000 years ago! One reason for the dinosaur's success was their ability to evolve.

Evolve: develop and change very quickly.

Dinosaurs lived during a period of the Earth's history called the Mesozoic (mez-oh-zoe-ick) Era. The Mesozoic Era spans 183 million years and is divided into three time periods:

- The Triassic Period (try-ass-ick)
- The Jurassic Period (jur-ass-ick)
- The Cretaceous Period (crest-ace-us)

These terms will be used throughout this guide to describe the time periods that different dinosaurs evolved and existed in.

Did you know: The history of the Earth is divided into many different time periods?

Did you know: The name Mesozoic Era is derived from the Greek language and means 'Middle Life'?

The world the dinosaurs inhabited looked vastly different from how it does today. During the Triassic period, all of the land masses were grouped together in one huge 'super continent' named Pangaea (meaning 'All Earth') and many continents we recognize today did not exist, or at least they were not in the locations that they are now!

The Triassic dinosaurs spread throughout Pangaea and over time, the Pangaea landmass began to split.



By the Jurassic period, it had split into two enormous continents named Laurasia and Gondwana. These two land masses also began to break up, and over millions of years they split into smaller continents each with different climates and plants, and groups of dinosaurs, which then evolved into new species to suit each new continent.



By the time of the *Cretaceous* period, the continents looked much as they do today.

Did you know: Pangaea was the biggest landmass there has ever been? This allowed the dinosaurs to spread far and wide across the planet.

Did you know: The world is constantly changing? The land moves slowly over vast amounts of time and landscapes become dramatically different.

WHAT IS A DINOSAUR?

Dinosaur bones have been around for millennia, but it was not until 1842 that the term 'dinosaur' was first coined. The first dinosaur to be described and named was presented as the *Megalosaurus* or 'Great Fossil Lizard of Stonesfield'. The bones and fossilized remains of this animal were found in the Oxfordshire village of Stonesfield.

William Buckland, Professor of Geology at Oxford, presented descriptions of the *Megalosaurus* discovery in a written paper, which was the first full account of a fossil dinosaur.

Did you know: Several of the first dinosaur discoveries were made in Oxfordshire?

The word 'dinosaur' was invented by Richard Owen, following the discovery of several more creatures that shared common features with *Megalosaurus*. Owen was a distinguished professor of anatomy and he based this new Dinosauria grouping on the shared features of the recently discovered large terrestrial (living on land) reptiles *Megalosaurus*, *Iguanodon* and *Hylaeosaurus*. He saw that they shared certain features (including hollow limb bones, and five-fused vertebrae where the spine fastens to the pelvis) and recognized that they were more than just the overgrown lizards the others had seen them to be.

Did you know: The word dinosaur, is a combination of two Greek words 'Deinos' (terrible) and 'sauros' (lizard)?

Prior to the 1800s, scientists struggled to interpret early findings of large bones that were occasionally dug from quarries. In 1677, before the discovery of dinosaurs, English Naturalist and Oxford Professor Robert Plot wondered if some of the large bones found could have been evidence of an elephant brought to Britain by the Romans. He finally concluded they were too large and so must be the remains of a giant! Dinosaurs are a large, yet very specific group of creatures. The word 'dinosaur' is often used incorrectly: Many people lump together all of the ancient reptiles (including the flying reptiles and marine reptiles) and call them dinosaurs.

Richard Owen's skill as an anatomist enabled him to begin creating a classification system for dinosaurs. He identified key common features and criteria which classed an animal as a dinosaur. Below are the 4 main features:

1. It must have lived during the Mesozoic Era
2. It must be a reptile (although not all reptiles are dinosaurs, for example lizards are reptiles, but they are not dinosaurs).
3. Its legs must be located below its body, as opposed to sticking out from the sides like the legs of a crocodile.
4. It must have lived on land, not in the water like swimming reptiles, or in the air like the pterosaurs. (However, the fossil record indicates that birds evolved from theropod dinosaurs during the Jurassic period, and consequently birds are now considered a type of dinosaur in modern classification systems.)

There are a number of other characteristics that many dinosaurs share:

- A large hole in the bottom of their basin-shaped hip socket
- A secondary palate (uncharacteristic of reptiles) that permits dinosaurs to eat and breathe at the same time
- A fairly straight thigh bone with an inwardly-turned head
- Two pair of holes in the temporal region of the skull
- Backward-pointing knees (or elbows) of the front legs
- Forward-pointing knees of the rear legs (rather than pointing sideways)
- Front legs shorter and lighter than the rear legs (in almost every case)
- A special bone at the chin, capping the front of the bottom jaw in some dinosaurs

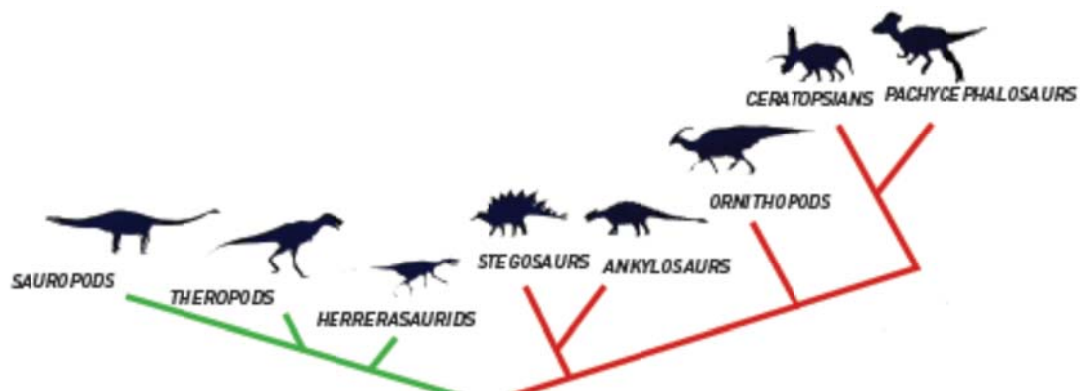
Dinosaurs evolved and adapted themselves rapidly during their 165 million year reign. Early in their evolutionary history, dinosaurs split into two major groups, defined (and named) by their different hip structures:

Saurischians (sore-iss-key-ans) means 'lizard-hipped' dinosaurs
Ornithischians (or-nith-iss-key-ans) means 'bird-hipped' dinosaurs

If that is not confusing enough, each group has several subgroups too! And within each subgroup are several different species of dinosaur.

Have a look at the Family tree below. It shows the two major groups along with their subgroups, along with a small sample of each sub group (it does not show all the individual species!) It is impossible to tell exactly how many species of dinosaurs there were since the fossil remains of new species are still being found each year. Approximately 700 species have been named so far.

Even if all 700 named species are valid, their number is still less than one-tenth the number of currently known living bird species, less than one-fifth the number of currently known mammal species, and less than one-third the number of currently known spider species -- which shows potentially how many more types of dinosaur there are still to discover.



Saurischians
Saurischians included the biggest dinosaurs of all (the long-necked sauropods) and the fearsome, Meat-eating theropods.

Ornithischians
Ornithischians included Record-breaking horned dinosaurs, spiky stegosaurus and the armour-plated ankylosaurus.

It can take a long time for scientists and paleontologists to classify dinosaurs. Sometimes, new dinosaurs are discovered and named, but *paleontologists* realize later that the dinosaur is actually a species of dinosaur already known to them!

The most famous case of mistaken identity is possibly that of the *Brontosaurus*. *Brontosaurus* used to be one of the most well-known dinosaurs until *paleontologists* realized that *Brontosaurus* was actually the same creature as *Apatosaurus*. Since *Apatosaurus* was discovered first, this is the name that was used going forward and the name *Brontosaurus* stopped being used.

Palaeontologist (*pay-lee-on-toll-oh-jist*) is the name given to someone who studies the forms of life existing in prehistoric or geologic times, through analysis of the fossils of plants, animals, and other organisms.



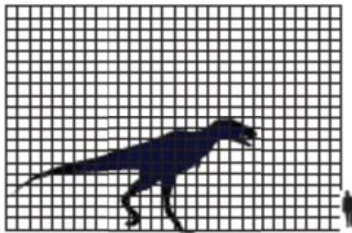
WELL KNOWN DINOSAURS THROUGHOUT THE WORLD

Have a look at our 'dinosaur hall of fame' over the next few pages to see a collection of the world's best known dinosaurs and to learn all about them.

There are so many dinosaurs that most of us have never even heard of the majority of them: Many interesting dinosaurs have not quite made it to the hall of fame, but perhaps in time, they will capture our imaginations in the way that T-rex and other popular dinosaurs have.

Do you have a favorite dinosaur?

TYRANNOSAURUS



T-rex is probably the most well-known dinosaur. It was first discovered by Barnum Vrown in 1902 and soon captured the public imagination.

T-rex is a type of theropod dinosaur and was one of the first giant, meat-eating dinosaurs to be put on display in a museum. At the time, it was thought to be the largest, but since its discovery, even larger carnivorous dinosaurs have been discovered!

FACT FILE

How to say it: Tie-ran-o-sore-us

Name means: Tyrant Lizard King

Family group: Tyrannosaur

Period: Late cretaceous 66 -70 MYA

Where found: North America

First Discovered: 1902

Height: 13 feet

Length: 46 feet

Weight: 7.7 tons

Food: Meat

Special Features: Large, sharp teeth

TRICERATOPS

Triceratops is a very large and distinctive dinosaur because of the three sharp horns on its head which give it its name.

Triceratops is classified as a cerapod and was one of the last dinosaurs to live on the earth.

FACT FILE

How to say it: Tri-ser-ra-tops

Name means: Three-horned face

Family group: Ceratopidae

Period: Late Cretaceous 66 -70 MYA

Where found: North America

First Discovered: 1889

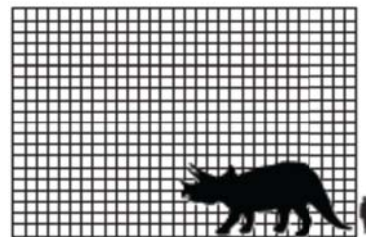
Height: 11 feet

Length: 29 ½ feet

Weight: 6 tons

Food: Plants

Special Features: Horns and frill



STEGOSAURUS

Stegosaurus is the largest member of the Stegosaur family but has one of the smallest brains — comparative to its body size — of all known dinosaurs.

The most impressive feature of Stegosaurus is the large plates running along its back. Paleontologists used to think these were for defense, but current thinking is that they were used to regulate temperature in some way.

FACT FILE

How to say it: Ste-go-sore-ru s

Name means: Roof Lizard

Family group: Stegosauridae

Period: Late Jurassic 146 - 154 MYA

Where found: North America

First Discovered: 1877

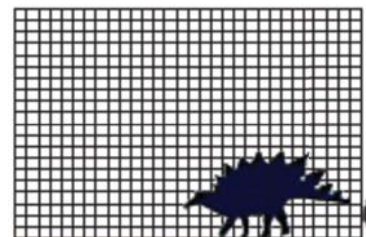
Height: 9 feet

Length: 29 ½ feet

Weight: 3 tons

Food: Plants

Special Features: Double row of distinctive plates along its back



DIPLODOCUS

Diplodocus was one of the dominant plant-eating dinosaurs during the late Jurassic era.

Diplodocus falls in the Sauropod category of dinosaur.

FACT FILE

How to say it: Di-plo-doh-kus

Name means: Double Beam Lizard

Family group: Diplodocidae

Period: Late Jurassic 145 – 161 MYA

Where found: North America

First Discovered: 1877

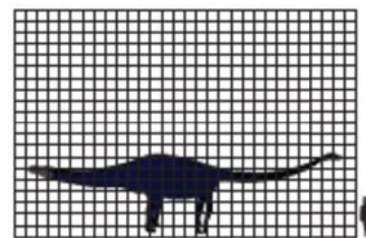
Height: 16 feet

Length: 88 ½ feet

Weight: 12 tons

Food: Plants

Special Features: Tall with a very long neck



APATOSAURUS

Apatosaurus is a large sauropod.

For many years, the most complete skeleton of an Apatosaurus was thought to be a different species and was named Brontosaurus. In the 1970s, it was finally proven that Apatosaurus and Brontosaurus were the same creature.

FACT FILE

How to say it: A-pat-oh-sore-rus

Name Means: Deceptive Lizard

Family Group: Diplodocidae

Period: Late Jurassic 145 – 161 MYA

Where found: North America

First Discovered: 1877

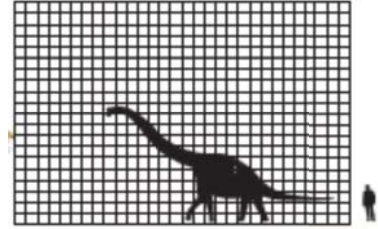
Height: 13 feet

Length: 69 feet

Weight: 33 tons

Food: Plants

Special Features: Enormous size and weight



VELOCIRAPTOR

Velociraptor was an agile, fast-running hunter. It was not the largest of predators but its keen intelligence and teamwork made it a very successful killer.

FACT FILE

How to say it: Vel-oss-ah-rap-tor

Name Means: Fast robber

Family Group: Dromaeosauridae

Period: Late Cretaceous 65 – 70 MYA

Where found: Mongolia

First Discovered: 1924

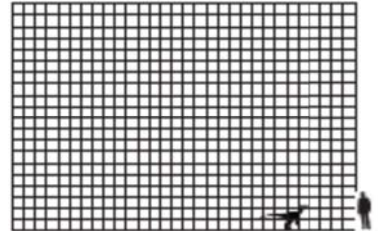
Height: 3 feet, 3 inches

Length: 6 ½ feet

Weight: 33 lbs.

Food: Meat

Special Features: Intelligence and deadly claws



SPINOSAURUS

Spinosaurus is a very large carnivore.

Significantly larger than T-rex and with a skull about three feet longer than most T-rex skulls.

FACT FILE

How to say it: Spine-oh-sore-rus

Name Means: Thorn lizard

Family Group: Spinosauridae

Period: Late Cretaceous 90 – 135 MYA

Where found: North Africa

1st Discovered: 1915

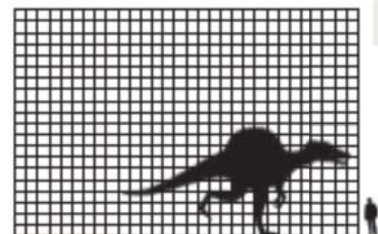
Height: 16 feet 5 inches

Length: 52 ½ feet

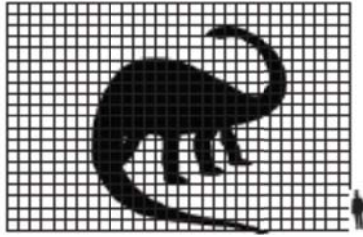
Weight: 4 tons

Food: Meat

Special Features: Large, sail-like crest along its back



BRACHIOSAURUS



Brachiosaurus is one of the largest known land animals. Its large nostrils were located on top of its head, which caused speculation that Brachiosaurus might have spent time submerged in water.

However, recent studies have shown that a creature as large as Brachiosaurus could not have inhaled and inflated its lungs against the water pressure at depths of total submergence.

FACT FILE

How to say it: Brak-ee-o-sore-us

Name Means: Arm Lizard

Family Group: Brachiosauridae

Period: Late Jurassic 146 – 161 MYA

Where found: North Africa/North America

First Discovered: 1900

Height: 52 feet 6 inches

Length: 98 feet 5 inches

Weight: 88 tons

Food: Plants

Special Features: Extreme height and weight

MEGANEURA

Meganeura was a gigantic primitive dragonfly with a wingspan over 2 feet. Meganeura were predatory, they fed on other insects and even small amphibians. Meganeura flew by beating two pairs of wings stiffened by “veins”. It flew to hunt flying insects above tropical forests, and had swiveling, multifaceted eyes like headlamps which were quick to spot movement and sharp enough to allow it to pounce on flying prey. It dashed to and fro in forests, changing speed and direction almost instantly, grabbing insects with its legs and bringing them up to the mouth to feed. Meganeura were around in the late

Carboniferous period, but not in either the Jurassic or the Cretaceous period. However, there were still large dragonflies in both these periods, and present day dragonflies are descended from these.

FACT FILE

How to Say it: Meg-a-NEW-ra

Name Means: Large –Nerved

Family Group: Meganeuridae

Period: Carboniferous 300 MYA

Where Found: World wide

First Discovered: France, 1880

Wingspan: Over 2 feet and perhaps larger

Food: Other insects, small amphibians

Special Features: One of the largest flying insects to have existed. Older than the dinosaurs

DRYOSAUR

Dryosaurs were bipedal and had powerful back legs, so it is likely they were fast runners. Their stiff tail balanced the body while standing or moving.

Dryosaurs were herbivores, using their hard beak to cut leaves and plants, and their oak leaf-shaped teeth at the back of their mouth to grind them up. Dryosaur fossils have been found in the Western United States, Tanzania and in New Zealand.

FACT FILE

How to Say it: Dry-O-sore

Name Means: Oak Reptile or Tree Lizard

Family Group: Dryosauridae

Period: Late Jurassic 145 - 161 MYA

Where Found: North America and Southern Hemisphere

First Discovered: North America, 1880s

Height: 5 feet

Length: 12 feet

Weight: One ton

Food: Plants

Special Features: Beak. Five fingers for gripping food

LEAELLYNASAURA

Leaellynasaura is one of many dinosaurs whose partial remains have been dug (and blasted) out of the solid rocks at Dinosaur Cove in Southeastern Australia. Leaellynasaura is a relatively recent dinosaur discovery and is known from several specimens including two nearly complete skeletons and two fragmentary skulls.

Its body was roughly turkey-sized (with a long tail) and it was an herbivorous ornithomimid. In the early Cretaceous period, areas of current day Australia were within the Antarctic Circle where the climate was extreme, with limited sun visible much of the year. Its skull has unusually large eye sockets, which suggests that Leaellynasaura adapted to the long winter darkness of the Antarctic and could withstand low, perhaps even subzero, temperatures. To do this, it would have needed a way of generating body heat, which some people have taken as evidence that dinosaurs were in fact warm-blooded.

FACT FILE

How to Say it: Lee-el-in-a-sore-rah

Name Means: Leaellyn's Lizard

Family Group: Undecided!

Period: Early Cretaceous 104 - 112 MYA

Where Found: Australia

First Discovered: Australia, 1989

Height: Unknown

Length: 6-1/2 feet

Weight: Unknown

Food: Plants

Special Features: Long tail compared to body size

TITANOSAUR

Titanosaurs were the largest animals ever to roam on land; they were sauropod dinosaurs that survived to the end of the Cretaceous period (most sauropods went extinct at the end of the Jurassic period). Titanosaurs grew to sizes far in excess of their earlier relatives; hence they are named after the mythological Titans, who were Gods of ancient Greece.

The biggest Titanosaur that we can factually estimate the size is Argentinosaurus, it grew up to 114 feet 9 inches in length! Titanosaurs discovered in Australia include Wintonotitan Wattsi and Diamantinasaurus Matildae.

FACT FILE

How to Say it: Tie-tan-O-sore

Name Means: Titanic Lizard

Family Group: Titanosauridae

Period: Cretaceous 65 - 96 MYA

Where Found: All continents

First Discovered: South America and India in 1877

Height: Up to 60 feet

Length: Up to 115 feet

Weight: Up to 100 tons

Food: Plants

Special Features: Very Large! Last surviving sauropod

SCALES, SPIKES FEATHER OR FUR?

No one knows exactly what colors or patterns most of the dinosaurs were. Coloring and pattern are suited to the functions that an organism needs to survive. Some dinosaurs were likely camouflaged in order to hide from predators or to sneak up on prey. Some may have been colored in a particular way to attract mates, and some may even have been brightly colored to ward off predators. Different colors are also important for temperature regulation because different colors absorb, or reflect sunlight. Fossilized skin impressions have only been found for a small fraction of the known dinosaurs. Not much is known about dinosaur skin and there is some debate among paleontologists on this topic.

Most skin fossils show bumpy skin; only the huge plant-eaters appear to have had scaly skin. Some of the bird-like dinosaurs even had feathers.

DID YOU KNOW there are dinosaurs flying in our skies today?

Despite almost 100 hundred years of disagreements, most scientists now acknowledge that birds today are the ancestors of small meat-eating dinosaurs. The development of feathers turned dinosaurs that could run or climb into birds that could fly.

The earliest true bird is Archeopteryx, which lived during the late Jurassic period. When Archaeopteryx remains were first unearthed, paleontologists quickly realized this was one of the most important dinosaur discoveries ever made because Archaeopteryx was the first feathered dinosaur ever found. Other dinosaurs developed feathers but were flightless like several types of bird known today, such as ostriches, emus and kiwisto, to name just a few.

IN THE AIR

At the time of the dinosaurs, there were a group of winged reptiles known as Pterosaurs. Pterosaurs are related to dinosaurs but are not classified as dinosaurs themselves. They had wings made of skin that stretched between long finger bones and the legs. They did not evolve to have feathers. Pterosaurs died out at the end of the Cretaceous period at the same time as the dinosaurs and did not evolve into modern day birds.

BELOW THE WAVES

While dinosaurs ruled the land and pterosaurs (and eventually flying dinosaurs like Archeopteryx) ruled the air, the ocean was home to many species of marine reptiles such as Nothosaurs, Ichthyosaurs, Pliosaurus, Plesiosaurs, Mosasaurs and Elasmosaurs. Most were fierce carnivores survived preying on other sea creatures — and on each other. Although they lived in the sea, many of these prehistoric creatures breathed air (like whales do).

BIPEDAL is the word used to describe any creature that walks on its two back limbs.

Can you imagine how difficult it is for paleontologists to reconstruct a dinosaur from fossils and bones, and try to imagine what it looked like just by this little and incomplete evidence?

Paleontologists need to be able to identify which bones belong to what type of creature, and they need to separate all the bones that might be found all together into the different species of dinosaur. They also must identify which part of the body each bone belongs to. It must be very difficult and so it is understandable that sometimes mistakes are made identifying and classifying dinosaurs.

FOSSILS

Dinosaurs are a great part of our world history. We know that dinosaurs (and other extinct animals and plants) existed because of the fossils they left behind.

DID YOU KNOW: Fossils are the preserved remains or traces of animals, plants, and other organisms from the remote past?

Fossils offer physical evidence of life prior to human history. This prehistoric evidence includes the remains of living organisms, prints and molds of their physical form, and marks/traces created in the sediment by their activities. Dinosaur fossils come in many types, from preserved bones, to tracks and more. Some fossils are better preserved than others and



show impressions of skin and other soft tissues. Fossil remains left by dinosaurs prove that they existed, and we are able to use the fossil evidence to recreate their skeletons and then start to create pictures of what they might have looked like.

There is still so much to learn about dinosaurs and new fossil discoveries are being made all the time.



WHERE ARE THEY NOW?

65 million years ago, at the end of the Cretaceous period, one of the most devastating mass extinctions of all time took place on earth. It wiped out between 60 and 80 percent of all living things and ended the dinosaurs' lengthy reign on earth. Many other groups of animals also became extinct at this time, including ammonites, mosasaurs, plesiosaurs, pterosaurs and many groups of mammals. Virtually all life on earth was affected. On land, no animal weighing over 55 lbs. survived.

The most common theory is that the mass extinction was caused by the impact of a giant asteroid or comet hitting the earth. Other theories suggest sudden volcanic eruptions may have been the cause of the extinction, or that dinosaurs simply failed to adapt to changing conditions.

Extinction is when a whole species or group of organisms is wiped out and ceases to exist. The moment of extinction is generally considered to be the death of the last individual of the species.

The discovery that birds are a type of dinosaur shows that dinosaurs in general are not extinct as is commonly stated. However, all non-bird dinosaurs, as well as many groups of birds and other life did suddenly become extinct approximately 65 million years ago.



ABOUT THE PUPPETS

In *Erth's DINOSAUR ZOO Live™*, the dinosaurs are portrayed by puppets.

A puppet is a figure whose movements are controlled by someone through strings, rods or hand/body actions.

The main style of puppetry used in *DINOSAUR ZOO Live* is a modified style of *Bunraku* (pronounced bun-rah-koo) puppetry, a form of puppetry that originated in Japan over 400 years ago.

In *Bunraku*, there are usually several puppeteers who manipulate the puppet directly and are visible throughout the play rather than being hidden. Usually three puppeteers will operate one puppet, and usually one puppeteer is responsible for moving a different part of the body. Puppetry in Japan is highly regarded. *Bunraku* is directly related to the kabuki, a mime theatre tradition and at one time was considered the highest form of theatre in Japan. The greatest writers and actors of the day created work exclusively for *Bunraku* performances. Many plays were written that are similar to Shakespearean dramas, with detailed language and complex plots. *Bunraku* plays are still performed today in Japan; a master puppeteer spends a lifetime perfecting manipulation of his puppet.



T-rex puppet and puppeteer from Dinosaur Zoo Live



Meganeura puppet in Dinosaur Zoo Live

So how much do you think you have learned about dinosaurs?

Student Evaluation Form
Dinosaur Questions and Answers

NAME: _____

GRADE: _____

TEACHER: _____

SCHOOL: _____

1. Can you name one plant eater and one meat eater from each of the following periods?

a. Triassic (250-200 million years BC) _____

b. Jurassic (200-145 million years BC) _____

c. Cretaceous (145-60 million years BC) _____

2. Name at least two things that were unusual adaptations to nature by the following dinosaurs?
(Use the back of the page if you need more room.)

a. Ichthyosaur _____

b. Diplodocus _____

c. Camptosaurus _____

d. Triceratops _____

e. Ankylosaur _____

f. Pterodactyl _____

g. Archaeopteryx _____

3. If you could design and build your own dinosaur panorama, which animals would you include and why? _____

(Use the back of this page if you need more space for item number 3.)

ERTH'S DINOSAUR ZOO!

Teacher Evaluation Form

NAME: _____

SUBJECT OR CONTENT: _____ GRADE LEVEL: _____

1. Were you able to complete the study guide and the student evaluations? YES NO

2. Do you feel that the Study Guide packet was useful in preparing your students for the *ERTH'S DINOSAUR ZOO* matinee? Were your students able to complete the (attached) supplemental dinosaur activities and introduction to paleontology page? Yes No.

Was it a useful supplement to the study guide? (Use the back of this form if you would like.)

3. From your instructional vantage point, describe the types of future ABT programming that would directly benefit you and your students in the following categories: (Please select as many categories that may apply and give a brief example or examples.)

Mathematics: _____

Life Sciences: _____

Social Studies: _____

Language Arts: _____

General Science: _____

Physical Science: _____

Advanced Mathematics: _____

Foreign Language: _____

World History: _____

Geography: _____

Physical Education: _____

Other: _____

Please return this form and your student evaluations to:

Dr. William M. Mouat

Director of Education and Community Outreach

Alberta Bair Theater

P.O. Box 1556 • Billings, MT 59103

wmouat@albertabairtheater.org