



NATURAL HISTORY MUSEUM



Welcome to Georgia College & State University's Natural History Museum. While you are enjoying the exhibits and the tour, please locate answers to the following questions.

Describe one **process** in which fossils are formed.

Describe the significance of **lobe-finned fishes**.

Where are the youngest fossils on display at the museum from?

What is a **coprolite** and what type of fossil is it?

Major groups of **arthropods** are often distinguished by what characteristic?

What is the date in MYA (million years ago) that scientists think **primates** began walking upright?

Name three groups of **reptiles** based on skull morphology and list a living group of animal that is included in that group.

What are three classes of **mollusks** that are on display in the museum?

List the five categories of **fish** and one defining character for each category.

The word **trilobite** means:

What could be an explanation for the difference in rate of species diversity between **rodents and rabbits**?

Based on the **Pleistocene of Georgia** display and other extinctions illustrated in the museum do you think that today's global warming is an isolated, unique event and explain why or why not?

The fossil on display that was used in rituals performed by Neanderthals: _____

List several **mammals** alive today that evolved in North America but no longer occur here naturally.

Whale **baleen** consists of the same protein that is in hair and fingernails. What is the name of this protein?

Describe several characteristics of **plants** that would help one determine the climate of an area.

What was the geologic event that caused the Great American Biotic Interchange?

List several animals that occur in Georgia today yet originated from South America.

ANSWERS

Describe one **process** in which fossils are formed.

Permineralization, replacement, carbonization, cast and mold, unaltered preservation

Describe the significance of **lobe-finned fishes**.

They are the group of fish that gave rise to the tetrapods.

Where are the youngest fossils on display at the museum from?

Brunswick Georgia

What is a **coprolite** and what type of fossil is it?

Fossilized feces, trace fossil

Major groups of **arthropods** are often distinguished by what characteristic?

Structures they use for feeding

What is the date in MYA (million years ago) that scientists think **primates** began walking upright?

Six mya

Name three groups of **reptiles** based on skull morphology and list a living group of animal that is included in that group.

Anapsids: turtles; **Synapsids:** mammals; **Diapsids:** lizards, snakes

What are three classes of **mollusks** that are on display in the museum?

Gastropods, Cephalopods, Bivalves

List the five categories of **fish** and one defining character for each category.

Agnathans- jawless; **Acanthodians-** extinct; **Placoderms-** armor plated jaws; **Chondrichthyes-** cartilaginous skeleton;

Osteichthyes- bony skeleton

The word **trilobite** means:

Three lobed body

What could be an explanation for the difference in rate of species diversity between **rodents and rabbits**?

Rodent high genetic mutation rate

Based on the **Pleistocene of Georgia** display and other extinctions illustrated in the museum do you think that today's global warming is an isolated, unique event and explain why or why not?

Answers will vary

The fossil on display that was used in rituals performed by Neanderthals: Cave Bear, *Ursus spelaeus*

List several **mammals** alive today that evolved in North America but no longer occur here naturally.

Rhinoceros, camel

Whale **baleen** consists of the same protein that is in hair and fingernails. What is the name of this protein?

keratin

Describe several characteristics of **plants** that would help one determine the climate of an area.

Thickness of leaves, leaf margins

What was the geologic event that caused the Great American Biotic Interchange?

The formation of the Panamanian Land Bridge, North American and South American tectonic plates colliding.

List several animals that occur in Georgia today yet originated from South America.

Armadillo, porcupine, opossum