

Museum Hall Worksheets

Suggested grade levels: Third grade – 8th grade

These worksheets cover the permanent exhibits in the Museum: Origins, The Age of Super Giants, New Mexico's Seacoast, Age of Volcanoes, The Quaking Earth, the Cave, and New Mexico's Ice Age.

Depending on the length and focus of a group's visit, students might be responsible for filling out all eight worksheets, or just a few. To avoid a major traffic jam, have groups of students begin at different exhibits.

Please have students use pencils while in the Museum.

Enjoy your visit!



Name _____

Origins

Why did the early Earth (4,600,000,000 years ago) look like the moon?

What do meteorites tell us about the origin of our solar system?

How much older are the meteorites than the oldest rocks on Earth?

age of meteorites	—	_____
(subtract)		
age of oldest earth rocks		_____
answer		_____

Describe the earliest life on Earth. What is it called?

How do we know that oxygen appeared on Earth between 2,800 – 2,200 million years ago?

Make a sketch of one of the organisms in the tank and write a sentence to describe it.





Name _____

The Age of Super Giants

If the Brachiosaurus was 6.8 meters at the shoulder, estimate how high it was to the top of its head.

List four things in the big mural that you could see living today:

- 1.
- 2.
- 3.
- 4.

Look at the three skeletons in the hall. Which dinosaurs were carnivores (ate meat)? Which were herbivores (ate plants)?

- | | | |
|---------------|------------------------------------|------------------------------------|
| Seismosaurus | <input type="checkbox"/> carnivore | <input type="checkbox"/> herbivore |
| Stegosaurus | <input type="checkbox"/> carnivore | <input type="checkbox"/> herbivore |
| Saurophaganax | <input type="checkbox"/> carnivore | <input type="checkbox"/> herbivore |

If you discovered a dinosaur skeleton, how would you know if it was a carnivore or an herbivore?

Why do you think that the Jurassic period is called the *Age of Giants*?

Challenge question: Can you find a mammal? Where is it?



Name _____

New Mexico's Seacoast

Name three ways the New Mexico of today is different from the New Mexico of the Cretaceous period, 144-65 million years ago.

- 1.
- 2.
- 3.

Pick one organism from the exhibit on the extinction wall ramp. _____
name of organism

Predict whether it survived the Cretaceous extinction Yes No

Give one reason for your answer: _____

Was your prediction correct? Yes No
Find out on the other side of the Extinction Room.

Play the Dating Game to find out how old the bird-like dinosaur skull is.

I think it is _____ million years old, because _____

What is one feature of the *Mosasaur* that makes it adapted to living in water?

CHALLENGE QUESTION

Did mammals live at the same time as the dinosaurs? Yes No



Name _____

The Quaking Earth

Find one earthquake that happened today. Record:

The time:

The location in the crust (shallow, intermediate, or deep):

The magnitude:

The location:

What instrument do seismologists use to measure earthquakes?

Go up to the mezzanine and observe the wall map for one minute.

(the red lights represent where earthquakes occur on Earth)

Where do most earthquakes occur?

Why do you think there is a pattern?

What is the Rio Grande Rift? What does it have to do with earthquakes?

CHALLENGE QUESTION (answer this after you have visited both the earthquake and volcano exhibits)

How are earthquakes and volcanoes related?



Name _____

The Age of Volcanoes

What is magma and where does it come from?

Find a volcanic feature that is found in New Mexico. Record:

Name:

Location:

Description:

Find the case with the rocks and minerals. What is your favorite rock or mineral? Write one sentence about why it's your favorite, and one sentence describing it.

1. _____

2. _____

How deep in the earth would you find your rock or mineral?

Under what kinds of temperature and pressure did the rocks on the right side of the case form?

How was the temperature and pressure different for the rocks and minerals on the left side of the case?



Name _____

Evolving Grasslands

What do you think the *Diatryma* ate? Explain your answer.

Name two things you can tell about the *Hyracotherium* by looking at its skeleton.

1.

2.

Pick out your favorite animal from the murals. Use the keys (found on the blue pedestals) to identify it.

Name _____ Order _____

Physical description _____

One fact about the animal _____

Look at the *Steogomastodon mirificus* jaw. How can paleontologists tell that it was from a young animal?



Name _____

Cave

How do fossils get inside a cave?

What do you notice is different between the dry cave (entrance) and the wet cave (middle)?

Find a cave formation and record its name:_____

Using words or a drawing, describe the formation:

How was it formed?

Spelunkers, people who explore caves, often give fanciful names to the formations they discover. Now it's your turn to name the large flowstone formation in the center of the cave. What do you think it looks like?

How are cave-dwelling animals adapted to living in a cave? How are they different from animals that don't live in caves?



Name _____

New Mexico's Ice Age

***Predators* are animals that hunt and eat other animals. *Prey* are animals that are hunted by other animals.**

Find one animal in the hall that is a predator:

Find one animal in the hall that is prey:

What's the difference between mammoths and mastodons? Compare their skulls to find one important difference. The mammoth skull is part of the complete skeleton and the mastodon skull is sitting beneath the skeleton.

Look at the mural, *A Panorama of Time*. Name three things that are different between the left side (representing New Mexico 20,000 years ago) and the right side (today).

1. _____

2. _____

3. _____

How much older is the viga from the Pueblo Bonito than the squared beam from the church in Bernalillo? Don't forget to record the units!

Age of squared beam _____

Age of Pueblo Bonito viga _____

Answer _____

