

Los Angeles County Natural History Museum Field Trip Name _____

Using the exhibits in the museum, answer the following questions.

The E. Hadley Stuart Gallery of Gems and Minerals

1. Name four of the really big minerals just outside the mineral hall. Which of the really large minerals outside this hall is your favorite? How come?

2. After you enter the Gem and Mineral Gallery, go watch the movie that will be playing straight ahead. Below, write down five interesting facts that you learned from the flick.

Hixon Gem Vault

1. Have diamonds ever been found in California? If so, describe where and how they were found.

2. What is the California State gemstone?

Where is it found?

Is it found anywhere else in the world?

3. What causes the stars seen in star sapphires and star rubies?

4. How many carats is the big blue topaz?

5. Where are the best resources for diamonds in the world?

6. How many carats is the opal sphere? Where was it mined?

7. What two minerals makeup moonstone?

8. Look at the minerals shown in the "Gemstones for Collectors" displays. Name five you see. Circle your favorite one. _____

Just outside the vault...

9. How many pounds is the Quartz crystal ball?

Basics of Mineralogy Exhibit (Across from the Gem Vault in the dark)

1. What kind of light causes fluorescence in some minerals? List three minerals that fluoresce in each type of light.

2. How do some minerals fluoresce? What colors do they fluoresce? What is actually going on?

Systematic Mineralogy Exhibit (Against the wall in the glass cases)

1. What is the name of a red variety of garnet? How about a green one? Why are they different colors? (Hint: Garnets are Nesosilicates)

2. Find at least three varieties of the mineral group feldspar (a tectosilicate) and name them below. How do they differ from one another? (Hint: Feldspars are Tectosilicates, but are different than quartz)

3. What are some minerals that contain Mercury?

4. What are some minerals that contain Lead?

5. What are some minerals that contain Zinc?

6. What are some minerals that contain Copper?

7. What is your favorite Phosphate? _____ Cyclosilicate? _____

Phyllosilicate? _____ Oxide? _____ Sulfide? _____

Carbonate? _____ Native Element? _____

California Minerals Exhibit Area

1. Make a list of the biggest minerals in this exhibit which came from San Diego county (Hint: San Diego county is in the Peninsular Range). Circle the one that you thought was most striking in appearance.

2. Make a list of the biggest minerals in this exhibit which came from the Desert Regions of California. Circle the one that you thought was most striking in appearance.

3. Make a list of the biggest minerals in this exhibit which came from the Sierra Nevada of California. Circle the one that you thought was most striking in appearance.

4. Make a list of the biggest minerals in this exhibit which came from the Coast Ranges of California. Circle the one that you thought was most striking in appearance.

5. In what California region are natural specimens of gold, silver, and platinum found?

In what two types of deposits do these metals typically occur?

6. How big is the Mojave Nugget?

7. What do they mix with gold to make the different grades (like 24, 18, 16 karat)?

Why would they mix something with Gold anyway?

Private Collections: In the back corner of the Gem room, there are several collections that were donated to the museum. Below are some of their names. Write down three minerals that you see from their collections.

David Eidahl: _____

Ben Frankenberg: _____

Mel Hinden: _____

General First Floor Lobby Questions

These two questions are found in the main lobby somewhere.

1. What types of critters are fossilized in the amber?
2. Who is fighting in the main exhibit hall?
3. What is a Megamouth? Who is hanging out with the Megomouth (in its tank)?
4. When did they catch the Catalina Island Oarfish? Where do they usually live?

The New Dinosaur Exhibit

- 1) How many skeletons did it take to create the Triceratops in front of you? Where were they discovered? What did they eat? When did these critters go extinct?
- 2) Compare and contrast the ornithiscians with the saurischians? Give a few examples of each.
- 3) What was a Sauropelta? What was weird about it? Where was it discovered? What did they eat? When did these critters live?
- 4) What was a Cryolophosaurus? What was weird about it? Where was it discovered? What did they eat? When did these critters live?
- 5) What was Einiosaurus? What was weird about it? Where was it discovered? What did they eat? When did these critters live?
- 6) What was Tianyulong? What was weird about it? Where was it discovered? What did they eat? When did these critters live?

The New Dinosaur Exhibit

7) What was Mamenchisaurus? How big was it? Where were they discovered? What did they eat? When did these critters live? How much of this fossil is original? Why do you think that is the case?

8) Find the one touch screen with the following info on it...fill in the blank area...

<u>Critter</u>	<u>Length</u>	<u>Weight</u>	<u>Diet</u>	<u>When?</u>
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Plateosaurus

Allosaurus

Carnotaurus

Majungasaurus

9) Describe the conditions that existed in the following time periods when the dinosaurs existed. Include critters that lived in each period too.

Triassic (251-200 MYA):

Jurassic (200-145 MYA):

Cretaceous (145-65 MYA):

10) Find the touch screen with the information about the following famous dinosaur fossil bearing rock units, and fill in the blank area...

<u>Time Span</u>	<u>Rock Description</u>	<u>Example Critters</u>
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Hell Creek
Formation

Morrison
Formation

Chinle
Formation

11) What was Plateocarpus tympaniticus? How big was it? Where were they discovered? What did they eat? When did these critters live? How much of this fossil is original? Why do you think that is the case?

12) How many ammonites are displayed on the wall?

13) Who was Camptosaurus dispar? What did they eat? When did these critters live?

The New Dinosaur Exhibit

14) Who was Carnotaurus sastrei? What did they eat? When did these critters live?

15) Who was Stegosaurus stenops? What did they eat? When did these critters live?

16) Who was Coelophysis bauri? What did they eat? When did these critters live?

17) Now it is time to play name that horny head.

	Horn Morphology (shape, number)	When?
Triceratops		
Styracosaurus		
Einiosaurus		

Mezzanine Area (upstairs-still dinosaur area though)

1) What is a Pterosaur? Name four, and when and where they lived.

2) How many dinosaurs have been found in California? What were they? Where were they found?

3) Who was Corythosaurus casuaris? What was weird about it? Where was it discovered? What did they eat? When did these critters live?

4) Who are the two critters they had on display that had crests and probably make hornlike noises?

5) How much heavier is your brain than a T. Rex?

6) What did they use to find a tumor on a Triceratops?

Mezzanine Area (upstairs-still dinosaur area though)

7) This museum has the only complete life span groups of T. Rex. How long is the T. Rex at age 2? Age 14? Age 25?

8) Describe the arrangement of the dinosaur eggs for the following critters:
Preprismatoolithus:

Oviraptoridae:
When and where were these egg clutches found?

9) Finally, Velociraptor, the star of Jurassic Park, is here. Name two things strange about the real one and the movie one...

11) What do the codes mean? Example: LMC 04-04-MT

Age of Mammals Display-More bones, yeah!

Find the following critters, and fill in the empty space...

Kind of Critter

Diet

When it Lived

Miohippus annectens

Epicyon haydeni

Paramylodon harlani

Up in the Mezzanine Area:

Paleoparadoxiid

Dusisiren jordani

Whose poop can be found up in the mezzanine (yes, it is a real question)?

African Mammals Display

Name three critters from this exhibit. Include their scientific name and common name.

Common Name

Scientific Name

North American Mammals Display

Name three critters from this exhibit. Include their scientific name and common name.

Common Name

Scientific Name

North American Mammals Display-Second Floor

Name three critters from this exhibit. Include their scientific name and common name.

Common Name

Scientific Name

Dino Lab-Second Floor

- 1) Who was Edmontosaurus? Where was it found? When did these critters live?
- 2) Dinosaurs survived in the form of their downsized descendants, the _____.
- 3) Name two dinosaurs that lived in the northcentral US.
- 4) Whose natural mold footprint do they have on the far wall of the dinolab? Where was it found? When did these critters live?
- 5) What are the lab folks working on inside the fishbowl?

Discovery Center

What types of activities do they have going on for the kiddies here?

Visible Vault

What kind of stuff is in the visible vault?

What kinds of minerals are some of this stuff made?

Birds of the World Exhibit

Find the biggest darn birds you can find. What are they? Name three....

- 1) Get on the scale, and find out how much your bones weigh.
- 2) How much do the birds of the extinct elephant bird weigh? How about the modern ostrich?

Second Floor Lobby

How big is the ammonite on display here?