

Lobby Area

Find the nice large ammonoid near the entrance to the upcoming Hall of Geologic Wonders.

- 1) What group do they belong? What other critters are they related?
- 2) When did ammonoids first appear on the planet?
- 3) When did they go extinct?

Petrified Forest

Take a look at the petrified wood, much of it is from the famous Chinle Formation.

- 1) Is petrified wood real wood? If not, what is it?
- 2) Describe how petrification takes place.
- 3) What types of trees have been petrified? Where were these samples found?
- 4) How many fossilized examples of Araucaria do they have on the wall? Where did they get these samples?

It's Fossil time, John C. Belcher North American Mammal Collection

- 1) Name three mammals found in the Punchbowl Formation.
- 2) Name three mammals found in the Barstow Formation.
- 3) What percent of life on Earth are insects?
- 4) What percent of life are plants?
- 5) Who is bigger, the Alaskan Brown Bear or the Polar Bear?
- 6) Who is hanging out with the bears in this exhibit?
- 7) There are no Grizzly Bears in southern CA. Where and when was the last one killed?
- 8) How big can Mountain Lions get?

9) Take a look at that big Bison. How big do they get? Is this one close to the largest found?

10) Compare and contrast the Desert Bighorn with the Rocky Mountain Bighorn. Who is bigger?

11) Find the Sugar Pine slab. How old was the tree when it was cut?

12) What is the only native marsupial to the US?

13) Who is *Tayassu tajaco*? What is it also known as?

14) What do Ravens have to do with the Desert Tortoise?

15) Just how big do Moose get?

Random Bird Questions (from the top floor)

1) Who is *Gymnogyps californianus*? How big is this critter?

2) What is oology?

3) Find the exhibit of the birds of the Great Basin. Name six critters found there.

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_____	_____
_____	_____

4) Find the exhibit of Sea Beaches and Rocky Coast. Name four birdies here.

_____	_____
_____	_____

5) Find the Colorado River/Salton Sea exhibit. Name six birdies here.

_____	_____
_____	_____
_____	_____

6) You know you love them. Find the sea gull exhibit. I did not know there were so many species of these critters. Name four.

_____	_____
_____	_____

7) Find the huge egg exhibit. There are a lot of eggs. There could be just a huge scramble. Not. Who has the largest eggs? Name the bird. What color is it?

Who has the largest speckled eggs?

What other colors do you see in the eggs?

When were the oldest eggs collected? Give me four old ones, the date collected, and the birdie.

<u>Birdie</u>	<u>Date Collected</u>
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Crossroads In History

You do not have to spend much time here, since most of it is outside the scope of my classes. However, go down, and take a look for these two questions, which do have something to do with something...

1) What is found in this hall, other than old stuff? List ten items.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2) Find the display by Southern California Edison on the History of Hydroelectric Display. What is on display from them? Where were they originally operating? How is hydroelectric accomplished?

Fossils underfoot exhibit- First floor, through the lobby at the end of the hallway into the Geology hall.

- 1) Trilobites Display. (Glass case to the right of the Large Ammonoid). Where were these Trilobites discovered? Hint (Rock Formation). How old are these fossils and what period did they exist?
- 2) Big fish display. What time period was the “Age of the fish”?
- 3) Name 5 fish from the Devonian period.
- 4) What period is the Pharyngolepis from?
- 5) This Fish was an active predator with sharp jaws. (Paleozoic) What is his name?

More Fossils....

- 1) Name the 3 fossils hanging on the wall.
- 2) Where did the Dimetrodon reside? What period?
- 3) When did the Paleozoic period end?
- 4) What percent of Marine and land based organisms vanished at the end of the Paleozoic Extinction?

Dinosaur Fossil exhibit.

- 1) Find the Huge Chasmosaurus head (Ceretopsid). How much would this DINO have weighed?

Plate Tectonic Exhibit. Located in the same Hall as the Fossils.

- 1) Look for The Geologic Mysteries Placard on the wall. What year did the theory of plate tectonics arise?

Plate Tectonic Exhibit-continued

- 2) “Earth Shaking Theories” Look at the map of world plates. Which plate is that big yellow one in the center of the map?
- 3) List the 4 steps of the scientific method. Hint (Evolution of science).
- 4) Find the huge Globe at the center of the plate tectonics exhibit. How long is the Mid Atlantic Ridge?
- 5) What is the largest Tectonic Plate on Earth?
- 6) Hawaii was formed from this kind of event?

FIND THE “Lines Of Evidence Makes Plate Tectonics A Reality” PLACARD.

- 7) Who’s the German Scientist that first hypothesized about Continental drift?
- 8) What is Pangaea and when did it exist?
- 9) What layer of the Earth’s interior lies between the Earth’s crust and the outer core?
- 10) How thick is the Earth’s rigid, rocky crust?

SEA FLOOR SPREADING.

- 1) What happens to old ocean floor crust when sea floor spreading occurs?
- 2) List (3) phenomena’s that are a result from Convection and sea floor spreading.

SEA FLOOR SPREADING - continued

- 3) List (3) types of plate tectonic boundaries along with (1) characteristic for each.
- 4) What type of plate boundary do we live on in Southern California?
- 5) What fault line do we live on?
- 6) “Slipping And Sliding”. Name the 2 Plates that separate the San Andreas Fault line.
- 7) What Mountain belt was formed when the Indian and the Eurasian plates collided?
- 8) List 2 examples of volcanic island chains that formed from ocean to ocean plate convergence?

More Geology!!...

Look for the big granite rock formation just left of the plate tectonic exhibit..

Read the “Back Yard Granite” placard on the granite rock formation.

- 1) What type of rock coalesced to form the Southern California Batholith? Hint (Look ^)
- 2) Take a look at all the fossils behind you. “The usual suspects”. Where did these fossils get unearthed?
- 3) “Geologist Read The Rocks”. What are (2) types of dating techniques used to piece together the history of earth?
- 4) Explain what the concept of relative dating is?
- 5) What method of dating determines the absolute date?
- 6) Look into the porthole displays on the sedimentary rock layers. List (5) ways to determine the age of sedimentary layers.