## A Walk Through the "Evolving Planet" Chicago Field Museum



### Foundations Trip for 9<sup>th</sup> Grade June 14, 2012

"Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have. But do this with gentleness and respect..."

1 Peter 3:15b

**Note:** All pictures with a \*\* can be found in the exhibit. Other pictures are from resources provided by *Answers in Genesis* (answersingenesis.org).

#### **Observational and Historical Science**

Note: You'll need to reference this page throughout the entire exhibit.

**Observational Science:** This type of science is based on evidence we can observe in the present, involving testing and repeating experiments (like when using the scientific method). It cannot tell us about the past such as determining where a rock came from, when a rock formed or how bone came to be fossilized.

**Historical Science:** This type of science is used to reconstruct events that have happened in the past. Historical science cannot be proven and is based on beliefs and assumptions. The best method of knowing about the past is having a reliable and accurate eyewitness.

Find 5 <u>Examples of Observational Science</u> (things you agree with) in the exhibit and list them here:

1. 2. 3. 4. 5.

Find **5** <u>Examples of Historical Science</u> (cannot be proven) in the exhibit and list them here:

- 1.
- 2.
- 3.
- 4.
- ч.
- 5.

#### How Life Began

1. Why do you think the exhibit begins with the earth being billions of years old?



- 2. Have scientists ever been successful in creating life from amino acids and other organic compounds? \_\_\_\_\_
- 3. Both evolutionism and creationism require \_\_\_\_\_\_ to believe their historical scientific views.
- 4. The difference is that creationism has a documented \_\_\_\_\_\_ account of the origin of life.
- 5. We both have the same \_\_\_\_\_, but different



**Extraterrestrial or God?** 



## What You Should Know About Geology and Radio Isotope Dating

<u>Uniformitarian View of Geology (evolutionary view)</u>: The process of nature such as volcanoes, earthquakes, floods, wind erosion, rain erosion, deposition in river deltas, coastal sea erosion, etc. <u>have always operated</u> <u>uniformly with the present degree or range of intensity, rate, and geographical extent of effect.</u> Large-scale geological change is slow, steady and gradual.

# Uniformitarianism is what most evolutions believe. It is needed to support "millions of years."

<u>Scriptural Geologists' View</u>: God supernaturally created a mature creation in 6 days about 4000 BC and then ceased creating. During the next approx. 1600 years before Noah's flood, the laws of nature operated basically as now, though with <u>different initial conditions</u> <u>which are not the same as the present</u>. Examples are a global tropical climate and greater plant and animal growth. Through the global flood of Noah's day, much of <u>the sedimentary rock record formed and the earth's</u> <u>surface was greatly changed</u>.

#### Radio Isotope Dating and Geology

6. Watch the video on **radio isotope dating**. To date a rock with this method, you must know how much of the "daughter element" was originally in the rock. That is \_\_\_\_\_\_ science unless we were there at the time the rock formed.

When the method is tested on rocks of known age (like Mount St. Helens' rocks), it fails miserably.



7. How do uniformitarians explain the fossils in the layers of sediment?

8. How do Scriptural Geologists explain the fossils in the layers of sediment?





SAME EVIDENCE, DIFFERENT HISTORICAL VIEWS!

#### **Natural Selection**

9. Watch the video in the exhibit on **Natural Selection (Genetic Variation)**. List the parts of the video you agree with (hint: these should be based on observational science.)

List the parts of the video you don't agree with (hint: these are based on "historical science").

#### What You Should Know About Genetic Variability

When there is diversity within a "kind" of animal, the genetic information *decreases* rather than *increases*, making it impossible to create a new kind from an existing kind of animal. Within a kind, genetic variability makes it possible for new *species* to form.

Note: Created "kinds" roughly correspond to the "family" level scientific classification.

10. Find the sign about Charles Darwin. What is the true reason for life's diversity?

11. What is the complete title of Darwin's book? Why do you think they leave off the last part?

On the Origin of Species by Means of Natural Selection,\_\_\_\_\_



#### Fossils

12. Watch the video on "How to Make a Fossil." What does it remind you of? How would you fit it into your Biblical worldview?





14. How would you comment on the statement circled below (from the exhibit)? Why do evolutions speculate on so many "mass extinctions?" Hint: Think about uniformitarianism.

\*\*



**Evolutionists Use** <u>Phylogeny</u> – the study of evolutionary relationships between all living organisms.

**Creationist Use** <u>Baraminology</u> – the study and classification of distinct groups of animals showing variety within a <u>created kind</u>.

15. What is a major problem with the evolutionary phylogenic tree?



16. How would you redraw this phylogenic tree to represent creation? Draw a rough sketch below.



#### Dinosaurs

17. Write down 2 – 3 differences you notice between the dinosaur exhibit at the Creation Museum and this one.

\*\*

Sauropods were

With strong, pillar-like legs and light, hollowed-out vertebrae that fit together in a unique way that strengthened the backbone, sauropods

were specially idapted to

engineered

for S

18. What's unusual about this sign given it is in an "evolution" exhibit?



There is no evidence of dinosaur \_\_\_\_\_\_ turning to

There is no suitable ancestor that exists from which the development of the \_\_\_\_\_ could come.



#### What You Should Know About Dinosaurs and Birds

Archaeopteryx has been touted in biology text books as the perfect transitional fossil between reptiles and birds because it had teeth (so do other fossilized birds), fingers on its wings (so does an ostrich) and a long tail. Now it is generally recognized as a TRUE BIRD.

Even if they claim it to be a transitional form, there are bird fossils "older" than Archaeopteryx which means it is not a missing link.

#### LUCY and Human Evolution

20. Write down 2 – 3 differences you notice between the Lucy exhibit at the Creation Museum and this one.

21. How do you think they came up with a face, hands and feet for Lucy given the bones they have found?



- 22. Name 3 things we know to be true about humans and apes from Genesis 1?
  - 1.
  - 2.
  - 3.

10

#### What You Should Know About "Apemen"

Since Scripture tells us that God didn't create any apemen, there are only three ways for the evolutionist to create one:



- 1. Combine ape fossil bones with human fossil bones and declare the two to be one individual—a real "apeman."
- 2. Emphasize certain humanlike qualities of fossilized ape bones, and with imagination upgrade apes to be more humanlike.
- 3. Emphasize certain apelike qualities of fossilized human bones, and with imagination downgrade humans to be more apelike.

These three approaches account for *all* of the attempts by evolutionists to fill the unbridgeable gap between apes and men with fossil apemen.

Taken from The New Answers Book 2, Chapter 8: Did Humans Really Evolve from Apelike Creatures?, by Dr. David Menton.

#### "Useless" Organs and Neanderthals

23. Pretend you are a scientist in the medical profession and you are trying to determine the purpose of goose bumps, wisdom teeth and the little toe. How might your approach be different if you had a biblical point of view vs. an evolutionary point of view?

24. The Field Museum claims that we are not related to Neanderthals. Take a look at the information <u>below</u> from the BBC News and National Geographic News in 2010. What does this say about the Field Museum's exhibit on Neanderthals? Why do you think they haven't changed it?



on the right is a Homo sapiens. Neanderthats, in general, are stacker and stocky bodies help retain heat. While stender Homo sapiens originated in warm Africa. Neanderthals first evolved in Europe—and with Earth in an ice age for the last 2.5 million years, Europe genera cold. Broutien frees

#### What You Should Know About Neanderthals

## A new genetic study has revealed that many modern humans have Neanderthal ancestry.

The study, published in the journal *Science*, compared the Neanderthal genome to the genes of five humans alive today. The comparison revealed that in some individuals, up to 4% of the total genome was of Neanderthal origin.

The scientists were led by Svante Paabo of the Max Planck Institute for Evolutionary Anthropology, who was involved in the original sequencing of the Neanderthal genome (which we reported on <u>last October</u>). "[Neanderthals] are not totally extinct," Paabo said. "In some of us they live on, a little bit."

University of Wisconsin–Madison anthropologist John Hawks added, "They're us. We're them." Hawks also noted that he was "surprised" at the extent of Neanderthal contributions to the modern human genome.

Genome: The complete set of genetic material of an organism.

What has God showed you today through this exhibit?

What did you learn today that you will use to witness to others about Jesus Christ?

What questions do you still have?

#### NOTES