

## The Origin of Humans

#### **DVD Lesson Plan**

#### Purpose of the DVD

The purpose of the DVD is to demonstrate that the credibility of the claims for transitional fossils between ape-like creatures and humans is very weak and circumstantial and that the scientific evidences point to a Creator God.

#### **DVD Theme**

The school textbooks are using deception by omitting the scientific evidence that contradicts evolution (deception by omission).

### Using the DVD to build an accurate knowledge of the scientific evidences about origins

There is much misinformation being presented in school textbooks about evolution, specifically about the origin of humans. This DVD will help the student objectively evaluate the claims used to support evolution and creation by presenting the scientific evidences not found in most textbooks.

The DVD is presented in three major sections:

- 1. An analysis of the claims by evolutionists
- 2. Three case studies
  - a. Neanderthals: Who were they?
  - b. Lucy and the australopithecines
  - c. A new apeman: ramidus
- 3. An evaluation of the mechanism for change
  - a. Natural selection
  - b. Mutations

### **How to Teach Using This DVD**

### Viewing the DVD for educational purposes (suggestions for maximizing learning)

For best learning results it is recommended that students:

- 1. Review the objectives.
- 2. Review the DVD outline.
- 3. Review the exercise questions prior to viewing the video. This will encourage the student to know what to look for and enable better learning.
- 4. While watching the video fill in the answers to each of the exercise questions so they can be used as a study guide.
- 5. After watching the video and studying the exercise sheet, complete the exercise again, in a test format (no notes).

#### **DVD Objectives**

At the completion of this video the student will be able to:

- State/write the current view of three former "facts" of evolutionists' claims of intermediate fossils between ape-like creatures and humans.
- State/write why the scientific evidence supports Neanderthals were 100% human.
- State/write the current scientific evidence about Lucy and the australopithecines.
- Compare the initial claims about A. ramidus and the current scientific evidence.
- State/write the how natural selection and mutations provide evidence for or against evolution.

#### **DVD Outline**

#### Part 1: An analysis of the claims by evolutionists

- Looking for evidence. If the evolution of humans from an ape-like ancestor is true there should be two proof evidences:
  - The fossil record
  - A mechanism for change
- The history of man
  - Evolution: assumes we have evolved
  - The Bible: teaches God created man
- School textbooks
  - Holt, Rinehart, & Winston, Biology Visualizing Life, 1998, p. 213. "Look closely at your hand. You have five flexible fingers. Animals with five flexible fingers are called primates. Monkeys, apes, and humans are examples of primates....Primates most likely evolved from small, insecteating rodent-like mammals that lived about 60 million years ago."

• Miller and Levine, Biology, 2000, p. 757.
"But all researchers agree on certain basic facts. We know, for example, that humans evolved from ancestors we share with other living primates such as chimpanzees and apes."

#### Java man

- In 1891, an apelike skullcap was found.
- In 1892, a human-like thighbone was found 40 feet away from the skullcap.
- Rudolph Virchow, a leading scientist of the time stated: "In my opinion this creature was an animal, a giant gibbon, in fact. The thigh bone has not the slightest connection with the skull."
- Dubois kept information hidden.
- Dubois insisted Java man was not a man but a creature intermediate to the gibbons and humans.
- Since 1950, anthropologists and textbooks have been calling Java man Homo erectus.

#### Piltdown man

- Parts were found between 1908 and 1912 in Piltdown, England.
- The claim was: a 500,000-year-old intermediate link.
- It was featured in textbooks and encyclopedias as the missing link.
- In 1953, it was discovered to be a fraud.
- The bones had been chemically stained to appear old and filed to fit together.

#### Nebraska man

- Fossil evidence discovered in 1922
- Used to support evolution in the 1925 Scopes trial
- Claimed to be a one-million year old missing link
- The truth: an extinct pig's tooth

#### Ramapithecus

- Pithecos: Greek for ape
- Discovered in the 1930's (jaw bone and teeth fragments)
- Claimed to be the 14-million year-old intermediate between humans and ape-like creatures
- The truth: In the 1970's a baboon living in Ethiopia with similar dental and jaw structure to Ramapithecus was found
- Ramapithecus was dropped from the human line
- Summary of "facts"
  - Java man was part human and part ape.
  - Piltdown man was a hoax.
  - Nebraska man was a pig.
  - Ramapithecus was an ape.
  - In every case the dates (millions of years) were wrong.

#### **PART 2: Three Case Studies**

- 1. Neanderthals
- 2. Lucy and the australopithecines
- 3. A. ramidus
- Case study 1: Neanderthals (Note: Neanderthal can be spelled two ways: with or without an "h". Neanderthal or Neandertal)
  - First found near Dusseldorf, Germany in 1856
  - Constructed to look ape-like
  - Brain capacity about 200 cc larger than humans
  - Initial construction discovered to be wrong
  - Characteristics (used jewelry, used musical instruments, did cave paintings, capable of speech, buried their dead)
  - Rearranging the data (lower jaw pulled out of socket by over an inch)
  - Drawing of a Neandertal fossil purchased at the souvenir counter at the museum in Berlin giving an ape-like appearance (Picture from *Buried Alive* by Dr. Jack Cuozzo)
  - Many Neanderthals had a thick brow ridge and a short stocky build with short extremities (arms and legs)
  - Dave Phillips (Physical Anthropologist), "Neanderthals Are Still Human," Impact Article #223, May, 2000

"Neanderthals were human. They buried their dead, used tools, had a complex social structure, employed language, and played musical instruments.

Neanderthal anatomy differences are extremely minor and can be for the most part explained as a result of a genetically isolated people that lived a rigorous life in a harsh, cold climate."

#### Neanderthal population

- o Common dates for Neanderthals are 100,000 to 35,000 years ago
- Neanderthals existed for about 65,000 years (2,600 generations)
- From year 1 to 2,000, our population has grown from about 300 million to 6-billion (100 generations)
- The problem
  - There should have been over 50-billion Neanderthals that lived during this time
  - Very few complete skeletons from over 2,600 generations!
  - Only located at 30 sites in 65,000 years!
  - O Where are all the fossils!
- Are textbooks and the media presenting all the information?
- If you receive only selected information are you being taught or indoctrinated?
- Why are textbook writers afraid of presenting all the information?
- Conclusion about Neanderthals
  - Protruding brow ridge
  - Stocky body build and short extremities

- Isolated population of people that lived in a cold, harsh climate
- o 100% human
- Case study 2: Lucy and the australopithecines
  - Discovered in 1974
  - About 40 percent of the fossil was found
  - It was claimed to be 3.5 million years old
  - It was claimed to be bipedal (walked upright)
  - Lucy and the Australopithecines
    - No similarity in appearance to humans
    - Long arms are identical to chimpanzees
    - Jaws are similar to chimpanzees
    - Upper leg bone is similar to chimpanzees
    - o Lucy's legs were very ape-like
    - Brain size (400-500 cc) overlaps chimpanzees
    - Large back muscles for tree dwelling
    - o Hands similar to pygmy chimpanzee
    - o Feet were long and curved
  - Richard Milton, Shattering the Myths of Darwinism, 1997, p. 207.
    - "... anatomists Jack Stern and Randall Susman,... who, in their 1983 study published in the American Journal of Physical Anthropology, described the anatomy of Lucy's species Australopithecus afarensis.
    - They described Lucy's hands and feet as being long and curved, typical of a tree-dwelling ape."
  - Did Lucy walk upright?
    - 1987: Charles Oxnard (Professor of Anatomy and Human Biology)
       Computer analysis concluded Lucy could not walk upright
    - 1992: American Journal of Physical Anthropology, Walked like chimpanzees
    - 1993: Christine Tardieu, (Anthropologist) reported, "Its locking mechanism was not developed."
    - 1994: Journal of Human Evolution, A Biochemical Study of the Hip and Thigh concluded Lucy could not walk upright
  - Did Lucy walk upright?
    - Richmand and Strait, "Evidence that Humans Evolved from Knuckle-Walking Ancestor," Nature, 2000.
      - "Regardless of the status of Lucy's knee joint, new evidence has come forth that Lucy has the morphology of a knuckle-walker."
    - E. Stokstad, "Hominid Ancestors May Have Knuckle Walked," Science, 2000.
      - "I walked over to the cabinet, pulled out Lucy, and shazam! she had the morphology that was classic for knuckle walkers."

 Charles Oxnard (professor of anatomy and leading expert on australopithecine fossils), The Order of Man: A Biomathematical Anatomy of the Primates, 1984, p. 332.

"The australopithecines known over the last several decades ... are now irrevocably removed from a place in the evolution of human bipedalism,...

All this should make us wonder about the usual presentation of human evolution in introductory textbooks..."

#### Conclusion on Lucy

 William Fix, The Bone Peddlers, 1984, p. xxii.
 "Lucy seemed to be more of a promotion to convince the public that Johanson's fossils were more important than Richard Leakey's rather than an attempt to present an evenhanded assessment of current paleoanthropology."

#### Review of evolution

- History of evolution: Mistakes and deception
- o Neanderthals: Misinformation and deception
- Lucy: Misinformation and deception

#### Case study 3: A. ramidus

- Announced discovery in 1994 (Aramis, Ethiopia)
- Name changed to Ardipithecus ramidus
- Dated at 4.4 million years old
- Time Magazine, October 3, 1994, p. 68.
  - "Bones from the Ethiopian desert prove that human ancestors walked on earth 4.4 million years ago."
- Newsweek, October 3, 1994, p. 57.
  - "Ramidus confirms once and for all that the common ancestor lived just a little more than 4.4 million years ago."

#### Five evidences for A. ramidus

- 1. It fits into the line of progression with all the other missing links
- 2. The date of 4.4 million years
- 3. The thickness of the enamel on the fossil teeth
- 4. The deciduous molar
- 5. It might have been bipedal

#### Ramidus: what was found?

- Fossils were collected from the surface at 17 different positions
- o Fossils were spread over 1-mile
- Eight teeth (most were damaged)
- o Parts of the base of the skull (found 500 meters away)
- Fragmented arm bones (found 270 meters away)

- Evidence 1: Line of progression
  - This is often used as evidence
  - o The validity of this line is not accepted by all evolutionists
  - The line-up changes from time to time some are dropped and some added
- Evidence 1: conclusion
  - Different textbooks have different lines
  - The line changes from year to year
  - o Evolutionists cannot agree on a single line of progression
- Evidence 2: Dating
  - o It was claimed to be the oldest hominid
  - There is no accurate dating method all dating methods are based on assumptions
  - The geologic context of the fossil was not well-established
  - The starting point of the dating process used biochronological comparisons of fauna from other places
- Evidence 3: Tooth enamel
  - Peter Andrews (Natural History Museum, London)
    - "... all other hominids, including modern humans, have relatively thick enamel.... So the thin enamel of ramidus is more of what you'd expect from a fossil chimp."
- Factors that can vary enamel thickness
  - Genetic variation
  - Environmental factors
  - Nutritional factors
- Evidence 4: Deciduous molar
  - White, Suwa, and Asfaw, "Australopithecus ramidus a new species of early hominid from Aramis, Ethiopia", Nature, 1994.
    - "The dm 1 has been critically important in studies of Australopithecus since the discovery of the genus 70 years ago,.... The Aramis dm 1 is morphologically far closer to that of a chimpanzee than to any known hominid."
- Evidence 5: Bipedality
  - It might have been bipedal
  - Note the word "might"
  - No foot, leg, or hip bone was found
  - A claim was made without any evidence
- Not all scientists accept ramidus
- Conclusion about ramidus
  - o All five evidences are based on deception
  - Great claims require REAL evidence
- Textbooks and objectivity
  - James Perloff, Tornado in a Junkyard, 1999, p. 106.
     "Most textbooks avoid showing comprehensive tables of the discovered human fossils – doing so exposes the contradictions."
- Evolution and objectivity

Philip Johnson, *Darwinism on Trial*, 1991, p. 84. (Graduate of Harvard U., Law Professor at U. of Berkeley)

"The fossils provide much more discouragement than support for Darwinism when they are examined objectively, but objective examination has rarely been the object of Darwinist paleontology. The Darwinist approach has consistently been to find some supporting fossil evidence, claim it as proof for 'evolution,' and then ignore all the difficulties."

- Science and evolution
  - In order to be a credible theory all the evidence must be examined.
     This has not been done.

#### PART 3: Mechanism for Change

- Evolution and change
  - A beneficial mutation occurs
  - Natural selection selects this mutation over any existing genes or other detrimental mutations that code for this function
  - The mutation is inherited by offspring
  - KEY: This process must add new information
- Natural selection
  - Ability to adapt to the environment
  - Survival of the fittest
  - Can natural selection cause one kind (species) to become a new kind? NO!
  - Natural selection ONLY works with existing information
- Natural selection
  - Elmer Noble, Ph.D. Zoology, Glenn Nobel, Ph.D. Biology, Gerhard Schad, Ph.D. Biology, Austin MacInnes, Ph.D. Biology, Parasitology: The Biology of Animal Parasites, 1989, p. 516.
    - "Natural selection can act only on those biological properties that already exist; it cannot create properties in order to meet adaptational needs."
- Natural selection
  - Neil Broom, How Blind Is the Watchmaker, 2001, p. 165. (Ph.D. Chemical and Materials Engineering)
    - "I would therefore argue that the very concept of natural selection as defined by the neo-Darwinist is fundamentally flawed...."
- Natural selection and mutations
  - Evolution: natural selection should eliminate harmful disorders
  - Mendelian Inheritance in Man (encyclopedia of human genes and disorders): Natural selection is NOT eliminating disorders (11,099 known disorders/mutations in the human species)
- Human variation
  - Watusi, Pygmy, Dwarfism, basketball players, Eskimo
  - Billy Barty (3 foot 9 inches), Shaquille O'neal (7 foot 1 inch)
  - We need to take into account genetic variation within a species due to age differences, gender, and gene pool.

- Mutations
  - Detrimental: disease no evolution
  - Neutral: no change and no evolution
  - Beneficial: must add new information, change the morphology and be inheritable
- Mutations and evolution
  - Jonathan Wells, Ph.D. Molecular Biology

"But there is no evidence that DNA mutations can provide the sorts of variation needed for evolution...

There is no evidence for beneficial mutations at the level of macroevolution, but there is also no evidence at the level of what is commonly regarded as microevolution."

Maxim D. Frank-Kamenetski, *Unraveling DNA*, 1997, p. 72.
 (Professor at Brown U. Center for Advanced Biotechnology and Biomedical Engineering)

"Mutations are rare phenomena, and a simultaneous change of even two <u>amino acid</u> residues in one protein is totally unlikely. ...

One could think, for instance, that by constantly changing amino acids one by one, it will eventually be possible to change the entire sequence substantially...

These minor changes, however, are bound to eventually result in a situation in which the enzyme has ceased to perform its previous function but has not yet begun its 'new duties'. It is at this point it will be destroyed – along with the organism carrying it."

 Lee Spetner (Ph.D. Physics – MIT, taught information and communications at Johns Hopkins University), Not By Chance, 1997, pp. 131, 138.

"But in all the reading I've done in the life-sciences literature, I've never found a mutation that added information...

All point mutations that have been studied on the molecular level turn out to reduce the genetic information and not increase it."

- Ernst Chain (Biochemist and Nobel Prize winner), Responsibility and the Scientist in Modern Western Society, London: Council of Christians and Jews, 1970, p.25.
  - "...that the development and survival of the fittest is entirely a consequence of chance mutations, or even that nature carries out experiments by trial and error through mutations in order to create living systems better fitted to survive, seems to be a hypothesis based on no evidence...."
- Ray Bohlin, (Ph.D. in molecular and cell biology), Creation, Evolution, and Modern Science, 2000, p. 41.
  - "We see the apparent inability of mutations truly to contribute to the origin of new structures. The theory of gene duplication in its present form is

unable to account for the origin of new genetic information – a must for any theory of evolutionary mechanism."

- Information: the key to change
  - Werner Gitt, In the Beginning was Information, 1997, p. 106. (Dr. Gitt was the Director at the German Federal Institute of Physics and Technology) "There is no known law of nature, no known process and no known sequence of events which can cause information to originate by itself in matter."

#### Summary

- If the evolution of humans from an ape-like ancestor is true there should be two proof evidences:
  - Fossil record: no intermediates have been found
  - Mechanism for change: there is no mechanism

#### Conclusion

Giuseppe Sermonti, Ph.D. Genetics, Creation ex nihilo, 1993, p. 13.
 "Many schools proclaim as a matter without any doubt that man has derived from the African apes....

This is a falsehood which any honest scientist should protest against. It is not balanced teaching. That which science has never demonstrated should be erased from any textbook and from our minds and remembered only as a joke in bad taste.

One should also teach people how many hoaxes have been plotted to support the theory of the simian (ape) origins of man."

- What does all this mean?
  - We must choose between God's Word and the deception of evolution

#### A warning

2 Timothy 4:3-4

"For the time will come when they will not endure sound doctrine; but after their own lusts shall they heap to themselves teachers, having itching ears; And they shall turn away their ears from the truth, and shall be turned unto fables."

#### **INTERVIEWS**

**Darryl White (Federal Judge, retired)** 

Frank Sherwin, M.A. Zoology

David Menton, Ph.D. Cell Biology and 34 years professor human anatomy

#### **ADDITIONAL RESOURCES**

Buried Alive by Dr. Jack Cuozzo Bones of Contention by Marvin Lubenow

#### **EXERCISES**

Exercises can be given in multiple ways to check the student's knowledge of the information presented on the DVD. Two methods have been included in this lesson plan.

- 1. Essay format
- 2. Fill-in and multiple choice format

The following pages include both formats.

### Origin of Humans Exercise (essay format)

1.	What two proof evidences should we find if evolution is true?
2.	What fossil evidence was found for Java Man? How far apart were the bones found? What did Rudolph Virchow, a leading scientist of the time, conclude about Java man?
3.	Piltdown man was once claimed to be the missing link. Why is Piltdown man no longer considered a missing link?
4.	Nebraska man was once claimed to be the missing link. What fossil evidence was actually found?
5.	For 40 years Ramapithecus was considered to be a missing link. Why is Ramapithecus no longer considered to be a missing link
6.	Java man was claimed to be 500,000 years old, Piltdown man 500,000 years old, Nebraska man 1-million years old, and Ramapithecus 14-million years old. How accurate were these dates?

	se study 1: Neanderthals  Describe the original construction of Neanderthals. Was it an accurate construction?
8.	Give 4 modern, human characteristics that have been discovered about Neanderthals.
9.	Many Neanderthals had a thick brow ridge and a short stocky build with short extremities (arms and legs). Does this mean they are evolving? Why or why not?
10.	Describe why Neanderthal population statistics refutes the evolution model that they lived between 10,000 and 35,000 years ago.
11.	Based on all the evidence, what can be concluded about Neanderthals?
	se study 2: Lucy and the australopithecines Lucy was discovered in 1974. What were the initial claims about Lucy?
13.	is Lucy's anatomy closer to a human or a chimpanzee? Explain your answer.

14. Cite three reports that conclude Lucy and the australopithecines could NOT walk upright.
15. What did Charles Oxnard, a professor of anatomy and leading expert on australopithecine fossils, conclude about the australopithecines?
Case study 3: A. ramidus  16. Describe what fossil evidence was found for A ramidus.
(Questions 17-21) Evolutionists claim five lines of evidence that support ramidus as an intermediate link. Respond to each claim.
17. Evidence 1: It fits into the line of progression with all the other missing links. Describe why this evidence is not valid.
18. Evidence 2: The fossil was dated at 4.4 million years old. How accurate was the dating for this fossil?
19. Evidence 3: The thickness of the enamel on the fossil teeth supports it was an intermediate link. Why is this conclusion not reliable?

20. Evidence 4: The deciduous molar supports it was an intermediate link. Why is this evidence not conclusive?
21. Evidence 5: It might have been bipedal supports that it was an intermediate link. What conclusion can be made from this claim?
22. Does natural selection cause change? Explain your answer.
23. Does natural selection support the evolution model? Explain your answer.
24. Describe what must occur for mutations to support the evolution model. Has this ever been observed?
25. What do Jonathan Wells (Ph.D. molecular biology), Lee Spetner (Ph.D. physics – MIT), Ernst Chain (Biochemist and Nobel Prize winner), Ray Bohlin, (Ph.D. in molecular and cell biology), Werner Gitt (Ph.D. physics), and Giuseppe Sermonti (Ph.D. genetics) conclude about mutations and evolution?
26. Explain how 2 Timothy 4:3-4 relates to the creation/evolution issue.

#### Origin of Humans Exercise (multiple choice/ fill-in format)

1.	For evolution to be true there needs to be at least two areas of evidence
	What are two of these evidences?

- 2. What fossil evidence was found for Java man?
  - a. Ape-like skullcap and human thighbone
  - b. Human skullcap and some teeth
  - c. Jawbone fragments, hip bone, and thighbone
  - d. A few teeth
- 3. How far apart were the fossils bones for Java man found?
  - a. They were found together
  - b. 10 feet
  - c. 40 feet
  - d. 1-mile
- 4. How is Java man referred to in textbooks today?
  - a. Ramapithecus
  - b. It is no longer used in textbooks
  - c. Homo *erectus*
  - d. As a version of the australopithecines
- 5. Piltdown man was claimed to be a "factual" intermediate link for over 40 years. Why is it no longer used to support evolution?
  - a. It was discovered to be a fraud.
  - b. It was discovered to be another australopithecine.
  - c. The evidence was lost.
  - d. It was discovered to be the remains of a pig.
- 6. Nebraska man was once claimed to be the missing link. What fossil evidence was actually found?
  - a. A human thighbone
  - b. A human skullcap and ape-like jawbone
  - c. A near complete skeleton
  - d. A pig's tooth
- 7. For 40 years Ramapithecus was considered to be a missing link. Why is Ramapithecus no longer considered to be a missing link?
  - a. A living baboon was discovered to have the same bone structure.
  - b. The fossil evidence was forged.

- c. The fossils found were that of a modern human.
- d. Ramapithecus was a combination of human and ape bones.
- 8. How accurate were the reported dates (age) for Java man, Piltdown man, Nebraska man, and Ramapithecus?
  - a. Only Ramapithecus was correct.
  - b. All the dates were wrong.
  - c. Piltdown man and Nebraska man were only a few thousand years different from what was reported.
  - d. The date of 500,000 years for Piltdown and 1-million years for Nebraska man were within 10,000 years of the actual age of the fossils.
- 9. How accurate was the original construction of the Neanderthals?
  - a. The ape-like appearance was accurate.
  - b. The ape-like appearance was wrong.
- 10. Which of the following are characteristics that have been discovered about Neanderthals?
  - a. They were very hairy creatures and lived in caves.
  - b. They lived in caves, were sub-human in appearance, and had no social structure.
  - c. They buried their dead, played musical instruments, and were capable of speech.
  - d. They were four to five feet tall, used spears for hunting, and lived in caves.
- 11. Many Neanderthals were discovered to have a short, stocky body build with a thick brow ridge. Is this characteristic of an ape-like creature evolving into a human?
  - a. Yes, there are many examples of fossil apes with these characteristics.
  - b. Yes, because no people living today have these characteristics.
  - c. No, it is characteristic of an isolated population of people living in a cold. harsh climate.
  - d. No, because neither apes or humans have these characteristics.
- 12. How does the claim that Neanderthals lived for over 65,000 years as a species refute or support evolution?
  - a. It supports evolution because 65,000 years is enough time to evolve into modern humans.
  - b. It refutes evolution because during this time billion of Neanderthals would have lived leaving behind thousands or millions of fossils. However, only a few bones have been found.

- 13. Based on all modern scientific evidence, what can be concluded about the Neanderthals?
  - a. They were 100 percent human and lived in a cold, harsh climate.
  - b. They were a separate species from modern humans and became extinct.
  - c. They are intermediate between the australopithecines and modern humans.
  - d. They are related to Piltdown man.
- 14. What were the **initial** claims about Lucy when the fossil was discovered in 1974?
  - a. Lucy could NOT walk upright and was 2-million years old.
  - b. Lucy was bipedal, lived in a cave, and was 1-million years old.
  - c. Lucy was related to modern humans.
  - d. Lucy was bipedal and 3.5 million years old.
- 15. What did anatomists Jack Stern and Randall Susman conclude about Lucy's hands and feet?
  - a. The hands and feet were identical to humans meaning it could walk upright like humans.
  - b. The hands and feet were long and curved, meaning it could not walk upright like humans.
- 16. In the year 2000, what did *Nature* magazine and *Science* magazine state about the status of Lucy?
  - a. Lucy could Not walk upright.
  - b. Lucy could walk upright.
- 17. What has modern research concluded about the status of Lucy and the australopithecines?
  - a. They were intermediate creatures between ape-like creatures and humans.
  - b. They are extinct chimpanzee-like creatures and could not walk upright like humans.
  - c. They could walk upright, but were related to ape-like creatures.
  - d. They were fully bipedal and lived 3.5 million years ago.
- 18. Ardipithecus *ramidus*, discovered in 1974, was claimed to be a human ancestor. How old is A. *ramidus* claimed to be?
  - a. 1-million years old
  - b. 3.5 million years old
  - c. 4.4 million years old
  - d. 6-million years old

- 19. What fossil evidence was found for A. ramidus?
  - a. Fossils were collected from 17 different locations, some over a mile apart.
  - b. A full skull and part of a thighbone were found.
  - c. A jawbone and skull were located over 40 feet apart.
  - d. A single tooth was found.

#### Questions 20 – 23: Evidences used to support ramidus

- 20. Evolutionists claim that A. ramidus falls into the line of progression with other fossils used to support human evolution. How compelling or valid is this evidence?
  - a. Not valid, because there are many lines of alleged progression and the line constantly changes.
  - b. Not valid, because ramidus is a completely different creature from all the rest of the ape-like creatures.
  - c. Valid, because it closely resembles the australopithecines.
  - d. Valid, because it fits between australopithecines and the Neanderthals.
- 21. Evolutionists claim ramidus is 4.4 million years old. Is this a valid claim?
  - a. Yes, because it was carbon dated to be 4.4 million years old.
  - b. Yes, because it was located in sedimentary rock dated to be 4.4 million years old.
  - c. No, because it was later dated to be only 3.5 million years old.
  - d. No, because the fossil was not directly dated and the dating methods used are based on assumptions.
- 22. Evolutionists claim the thickness of the tooth enamel makes it an intermediate form between ape-like creatures and humans. Is this good evidence?
  - a. Yes, because the tooth enamel was half-way between an ape and a human.
  - b. Yes, because it was thick like a human's tooth enamel, but dated to be 4.4 million years old.
  - c. No, because there are many factors that can affect tooth enamel such as genetic variation, environmental factors, and nutritional factors and none of these were taken into consideration.
  - d. No, because not enough of the tooth was found to determine the actual thickness of the enamel.
- 23. Evolutionists claim ramidus could walk upright (bipedal). Is this a valid claim?
  - a. No, because it was a claim with no supporting evidence. No foot, leg, or hipbone was found.
  - b. No, because it's legs were too short to walk upright.
  - c. Yes, because at that time ape-like creatures had already advanced to upright walking.
  - d. Yes, because its hipbone was identical to humans.

- 24. In order to be a credible theory, all scientific evidence should be examined. Has this been done in the cases used to support human evolution?
  - a. Yes
  - b. No
- 25. What does natural selection mean? (circle all that apply)
  - a. Ability to adapt to the environment
  - b. It is a form of evolution.
  - c. Survival of the fittest
  - d. It is the main cause of evolution.
- 26. Which is true of natural selection? (circle all that apply)
  - a. Natural selection is a main cause of evolution.
  - b. Natural selection never adds new information.
  - c. Natural selection can cause a loss of information.
  - d. Natural selection only works with existing information.
- 27. According to the model of evolution, natural selection selects new beneficial mutations and eliminates harmful mutations. Is this true?
  - a. Yes
  - b. No
- 28. What types of mutations occur most often?
  - a. Beneficial
  - b. Neutral and detrimental
- 29. Are beneficial mutations sufficient to cause evolution to occur?
  - a. Yes
  - b. No
- 30. In order to have evolution occur what must take place?
  - a. Beneficial mutations
  - b. Beneficial mutations that add new information
  - c. Beneficial mutations that add new information that code for a change in morphology and are inherited
- 31. According to Jonathan Wells (Ph.D. Molecular Biology), Maxim Frank-Kamenetski (Professor of Advanced Biotechnology), Lee Spetner (Ph.D. Physics), Ernst Chain (Biochemist and Nobel Prize winner), and Ray Bohlin (Ph.D. Molecular and Cell Biology), what can be concluded about mutations?
  - a. Mutations are the main source of evolution.
  - b. There are no known mutations that have ever added new information.
  - c. The combination of natural selection and beneficial mutations are sufficient to cause evolution.

- d. Given enough time, enough beneficial mutations will occur allowing for evolution to occur.
- 32. Based on all known science, what can be concluded about the mechanism to cause evolution to occur?
  - a. Evolution must have occurred even though the mechanism is not known.
  - b. Mutations are the key source of new information for evolutionary change.
  - c. There is no known mechanism for evolution to occur.
  - d. Since evolution is a fact, natural selection and mutations must be the mechanism for biological change over time.

33	. Fill in the blanks to the following Scripture verse: 2 Timothy 4:3-4.
	For the time will come when they will not endure sound;
	but after their own lusts shall they heap to themselves teachers having
	; And they shall turn away their ears from the
	, and shall be turned unto

### Origin of Humans Exercise (essay format) Answer Key

- 1. If the evolution of humans from an ape-like ancestor is true there should be two proof evidences:
  - The fossil record
  - A mechanism for change
- An ape-like skullcap and a human-like thighbone were found.
   They were found 40 feet apart.
   Rudolph Virchow stated the thighbone had nothing to do with the skullcap. He concluded the thighbone was from a large gibbon (ape).
- 3. Piltdown man: the bones had been chemically stained to appear old and the teeth had been filed down to make them fit. The entire find was a fraud.
- 4. Nebraska man: The entire fossil evidence consisted of a single tooth that turned out to be a pig's tooth.
- 5. Ramapithecus: In the 1970's a baboon living in Ethiopia was discovered to have a near identical jaw structure of Ramapithecus. As a result, Ramapithecus has been dropped from the line of human evolution.
- 6. In each case the dates were completely wrong.

#### **Neanderthals**

- 7. The original construction of Neanderthals was very ape-like. This construction was later discovered to be very wrong. When reconstructed, Neanderthals looked very human.
- 8. Neanderthals used jewelry, used musical instruments, did cave paintings, were capable of speech, buried their dead, and had a larger brain capacity than people today.
- 9. No. There are people living today (the Inuits) which have similar body shapes. A thick brow ridge can be caused in two ways: 1) The way we chew can cause concentrated compression upward in the jaw structure causing the brow ridge to jut out. 2) Since the facial bones in humans continue to grow, people who lived to an old age (over 100 years) could take on an appearance similar to Neanderthals.
- 10. If the Neanderthals lived for 65,000 years, population statistics demonstrates that there would have been over 50 billion Neanderthals that lived during this period. The question is, "Where are all the fossils?" We have found only very few fossils of Neanderthals. Population statistics therefore refutes the evolutionists' claim about Neanderthals.

- 11. Neanderthals were 100 percent human and lived in a cold, harsh climate.
- 12. It was initially claimed that Lucy was 3.5 million years old and that she could walk upright.
- 13. Lucy's anatomy is closer to a chimpanzee than a human. The arms, legs, brain capacity, hands, and feet are all chimpanzee-like. Lucy was also about 3-feet tall.
- 14.1987, Charles Oxnard (Professor of Anatomy) The Order of Man: A Biomathematical Anatomy of the Primates 1992, American Journal of Physical Anthropology 1994, Journal of Human Evolution 2000, Nature Magazine 2000, Science Journal
- 15. The australopithecines were not part of the human evolution line and they could not walk upright.
- 16. Fossils were collected from 17 different locations. The fossils were spread over a one-mile range. Eight teeth were found. Parts of the skull were found 500 meters away. Fragmented arms bones were found 270 meters away.
- 17. This is often used as evidence, however, not all evolutionists agree on what this line should look like and the line is constantly changing.
- 18. First, there is no accurate dating method. All dating methods are based on assumptions. Second, the fossil was not directly dated. The scientists used comparisons with other fossils found in the area to date ramidus.
- 19. The thickness of the enamel is not a reliable method because there are several factors that can affect the thickness. These include, genetic variation within species, environmental factors, and nutritional factors. None of these were taken into account. Finally, the enamel on the tooth found with ramidus was thin which is more like that found in chimpanzees.
- 20. The deciduous molar (dm) was much closer to that of a chimpanzee and not like anything human.
- 21. The only conclusion on upright walking was that "it might have been bipedal." This means their conclusion was only a guess. Also no foot, leg, or hipbones were found making it impossible to make such a determination.

- 22. Natural selection only causes change within a species because it can only select from the existing information. Natural selection has never added new information. In many cases it causes a loss of information.
- 23. Natural selection does not support evolution. In order to have evolution there must be added new information to the DNA. Natural selection only works with existing information. Natural selection is claimed to select only new beneficial mutations; however, this has been shown to be incorrect. According to the Mendelian Inheritance in Man Encyclopedia of Human Genes and Disorders, there are over 11,000 known disorders and mutations in the human species. In addition, if natural selection is supposed to deselect bad mutations and only select new beneficial mutations, why do we still have cancer and so many other deadly diseases?
- 24. For evolution to occur there must be beneficial mutations that add new information, that change the morphology, and are inherited. This has never been observed.
- 25. All these scientists, and many more, conclude that there are no known mutations that have added new information. This means evolution is without a mechanism for macro-change.
- 26. 2 Timothy 4:3-4 is an accurate prediction for what is happening today. People are abandoning the truth for just-so stories that tickle their ears. This just-so story is called evolution because there are no facts to support it and it is opposed to the Bible.

# Origin of Humans Exercise (multiple choice/ fill-in format) Answer Key

1. The fossil record and a mechanism for change 2. a 3. c 4. c 5. a 6. d 7. a 8. b 9. b 10. c 11. c 12. b 13. a 14. d 15. b 16. a 17. b 18. c 19. a 20. a 21. d 22. c 23. a 24. b 25. a, c 26. b, c, d 27. b 28. b 29. b 30. c 31. b 32. c 33. doctrine, itching ears, truth, fables