

## **Quiz #13**

### ***Chapter 9 – The Rise of Modern Humans***

1. How did the genus *Homo* differ from the earlier hominins? How did its skull differ?  
How did its limb bones differ?
2. When was the *middle Pleistocene*? The *late Pleistocene*?
3. The Mauer mandible is associated with
  - a. *H. neandertalensis*
  - b. *H. heidelbergensis*
  - c. *H. erectus*
  - d. *H. sapiens*
4. What is the difference between *Homo erectus* and *Homo ergaster*?
5. Physically, how did *H. ergaster* differ from the earlier hominins?
6. T/F There were two distinct hominid species present in Asia in the latter part of the middle Pleistocene.
7. T/F *H. ergaster* could run for long distances.
8. What is the *H. ergaster* tool tradition called?
  - a. Oldowan
  - b. Mousterian
  - c. Acheulean
  - d. Neandertalean
  - e. Chatelperronian
9. What might hand axes been used for?
10. What sorts of tools might archaic *H. sapiens* made from organic materials?
11. What happened to the world's climate during the middle Pleistocene?

12. T/F Homo ergaster was likely to have been the first hominid to use fire in a controlled manner.
13. What were the likely uses of fire?
14. T/F From the neck down Homo erectus was essentially like modern humans.
- 15 . Where was H. heidelbergensis found?  
a. Heidelberg, Germany b. Germany and France c. all over Europe d. all over the Old World
16. Why did H. erectus (Asia) and H. ergaster (Africa) have different kinds of tools?
17. T/F H. heidelbergensis may have co-existed with H. erectus in Asia.
18. When and where was the first Neanderthal discovered? What was it considered to be?
19. Neanderthals have been considered (select those that apply)  
a. archaic sapiens b. a subspecies of H. erectus c. a dead-end branch of human evolution  
d. a form of modern H. sapiens
20. During what period of time did Neanderthals live? Where did Neanderthals live?
21. T/F Neanderthal brains were somewhat smaller than the brains of modern humans.
22. How did Neanderthal bodies compare to those of modern humans?
23. How did Neanderthals treat their elderly and their dead?
24. T/F Neandertals buried their dead with elaborate grave goods.
25. What is the Neandertal tool tradition called?  
a. Aurignacian b. Mousterian c. Acheulean d. Neandertalean e. Chatelperronian
26. T/F Neandertals were skilled hunters.
27. T/F Neandertals evolved into the modern Europeans of today.
28. T/F Neandertals interbred with other early modern humans.

29. T/F DNA evidence was used to establish that Neandertals were not our ancestors.
30. T/F Like living humans, there is relatively little diversity in their mitochondrial DNA.
31. What color skin and hair did Neandertals living in Sidron Spain have?
32. T/F Neandertal life expectancy was about 45 years.
33. T/F Neandertals were just as capable of producing symbolic cultures as other early modern humans.
34. What anatomical differences are there between Neandertals and modern day humans?
35. T/F Neandertal newborns were similar in brain size to modern humans but may have matured somewhat faster.
36. Many Neanderthals 80% suffered trauma during their lives.
37. What evidence is there that a Neandertal might have *healed* from a wound?
38. T/F Most of the injuries sustained by the Neandertals do not seem to reflect deliberate violence.
39. What evidence is there that Neandertals cared for one another?
40. T/F It is only in recent times that human groups have cared for injured and aging members.
41. T/F Most Neandertals used their front teeth as cutting tools.
42. T/F It's likely that Neandertals were cannibals.
43. The postcranial skeleton of the Neandertals was \_\_\_\_\_ compared with that of modern humans.
  - a. small
  - b. the same size
  - c. massive
  - d. more gracile
44. Which of the following best describes the "lumper's perspective"?
  - a. Neandertals represent one of many distinct Middle Paleolithic hominid species.
  - b. Archaic *H. sapiens* are actually members of the species *H. heidelbergensis*.
  - c. Neandertals and archaic *H. sapiens* were all part of one potentially interbreeding species.
  - d. Neandertals and archaic *H. sapiens* could not and did not interbreed.

### ***Rethinking Neandertals and Modern Humans***

1. T/F The collision between H. sapiens and Neandertals happened many times.
  2. T/F The Neandertals were neither stupid nor easily driven to extinction.
  3. How long have there been modern humans?
  4. How big were Neandertal living groups?
  5. T/F More fossil Neandertals have been found than any other extinct human species.
  6. Around 40,000 years ago innovations occurred in Neandertal tool making technology, what may have caused this?
  7. T/F The cultural styles of H. Sapiens and Neandertals remained distinct after they encountered each other.
  8. What evidence supports the notion that H. Sapiens and Neandertals successfully mated (produced fertile offspring)?
  9. What evidence is there that Neandertals are not our direct ancestors?
  10. Do you think it's possible that once diverse populations left Africa and settle into the Old World they continued to mate (and thus exchange genes) with each other?
  11. T/F Both Neandertals and Cro-Magnons (H. Sapiens) buried their dead.
- Emergence of Modern Humans

### ***The First Homo sapiens***

1. When and where did fully modern humans first appear?
2. The Klasies River Mouth site in South Africa is noted for all the following EXCEPT:
  - a. human fossils of modern appearance
  - b. bifacial blades made with the punch technique
  - c. evidence of big game hunting
  - d. the first evidence of art
  - e. heavy reliance on beach combing for shell fish
3. Humans first entered the New World \_\_\_\_\_ years ago
  - a. 15,000-20,000
  - b. 30,000
  - c. 60,000
  - d. 100,000
  - e. 500,000
4. What are the possible ways humans first entered the New World?

5. How important was meat in the diet of ancestral humans?
6. How might ancestral women have participated in hunting
7. How often did ancestral men engage in big game (e.g. mammoth) hunting?
8. T/F Human survival had little to do with macho men hurling spears at big-game animals.

### ***Origins and Dispersal of Homo sapiens***

1. Where were the first fossils of modern humans found in Europe?
2. Which of the following characteristics distinguishes our species from archaic *H. sapiens*?
  - a. a more gracile skull
  - b. thick teeth enamel
  - c. a rounded cranium
  - d. relatively small teeth and jaws
  - e. bipedalism
3. When did modern humans first enter Australia?
4. What was the tool industry of the Upper Paleolithic?
  - a. Aurignacian
  - b. Mousterian
  - c. Acheulean
  - d. Neandertalean
  - e. Chatelperronian
5. T/F The peoples of the Upper Paleolithic lived at higher population densities than the Neandertals.
6. What are the basic differences between the Replacement Model and the Multiregional Model regarding the evolution of *Homo sapiens*?
7. T/F Both the replacement and multiregional models of human origins agree that there was an initial dispersal of *H. erectus* from Africa into the rest of the Old World.

8. The Multiregional Model claims *Homo sapiens* first emerged \_\_\_\_\_ years ago.  
 a. 2 million b. 1 million c. 150,000 – 200,000 d. 500,000 e. 36,000
9. When does the Replacement Model claim *Homo sapiens* first emerged?
10. T/F The Replacement Model says that transitional forms between archaic and modern humans should be found throughout the Old World.
11. Why does the Replacement Model contend that modern humans should show little genetic diversity?
12. The Multiregional Model says that all proposed species of *Homo* after *habilis* should be lumped into which of the following:  
 a. *Homo erectus* b. *Homo heidelbergensis* c. *Homo neanderthalensis*  
 d. *Homo sapiens*
13. How would proponents of the Replacement Model explain the simultaneous existence of *Homo sapiens* and *Homo neanderthalensis* in Europe?
14. Should large continuous brow ridges be considered an example of a not-yet-modern human?
15. According to the “splitters” how many pre-modern species of *Homo* are there? What are they?
16. T/F Mitochondria are the energy factories of cells.
15. Mitochondria are inherited from:  
 a. one’s father b. one’s mother c. both parents d. cannot be predicted
16. T/F Mitochondrial Eve Hypothesis traces all of our mtDNA to a 200,000 year old African woman.
17. T/F Mitochondrial DNA mutates at about the same rate as nuclear DNA.
18. T/F mtDNA that was extracted from a Neanderthal specimen established that it was outside the range of modern human variation.
19. Why, according to Christopher Stringer was gene flow (e.g. Multiregional Model) unlikely? (select those that apply)

a. hominid populations were very thinly spread b. there were many geographical barriers  
 c. they weren't attracted to members of other *Homo* populations d. there is no  
 precedence for a multi-regional theory in any animals species

20. The \_\_\_\_ chromosome is the male equivalent of female mitochondrial DNA.

a. X b. 23<sup>rd</sup> c. 14<sup>th</sup> d. Y

21. The most recent common ancestor (MRCA) measurements from both Y chromosome  
 and mtDNA show that

- a. humans evolved in Africa and then moved out less than 200,000 years ago
- b. humans evolved millions of years ago in contradiction to all of our archaeological data
- c. humans are all related through Neandertal
- d. clear distinctions exist between European, African, and Australian humans

### **The Littlest Human**

1. Where is the island of Flores?
2. How tall was *H. floresiensis*?
3. T/F *H. floresiensis* had a cranium similar in size to a small australopithecine.
4. How long ago did *H. floresiensis* live?
5. What animals lived along side *H. floresiensis*?
6. What happens to mammals isolated on small islands? (select all that apply)
  - a. mammals larger than rabbits tend to shrink b. mammals smaller than rabbits tend to  
 increase in size c. hominids tend to shrink d. hominids tend to grow
  - e. large mammals die off
7. T/F *H. floresiensis* tools reveal a sophistication comparable to *H. sapiens*.
8. What activities might *H. floresiensis* have engaged in? (select those that apply)
  - a. group hunting b. craft production c. controlled use of fire d. warfare
  - e. horticulture

9. How might the Flores Island find best be classified?
  - a. microcephalic *H. sapiens*
  - b. dwarfed descendant of *H. erectus*
  - c. an ancestor parallel to *H. habilis*
  - d. a descendant of *A. africanus*
  - e. a new species *H. floresiensis*
10. T/F There may not be a direct relationship between brain size and the ability to manufacture sophisticated tools.
11. How did *H. floresiensis* get so small?
12. T/F For 15,000 years *H. floresiensis*, *H. erectus* and *H. sapiens* lived contemporaneously in Indonesia.

### ***The Birth of Childhood***

1. T/F Human children have been known to survive on their own after weaning.
2. T/F Humans take twice as long as chimpanzees to reach adulthood.
3. T/F Australopithecine children matured at the rates of apes as opposed to humans.
4. New dating techniques have revised the age of the Turkana boy from \_\_\_\_ to \_\_\_\_.  
a. 8, 13 b. 15, 10 c. 12, 9 d. 13, 8
1. T/F *Homo erectus* families were similar to our own.
2. What techniques are used to measure the ages of fossil children?
3. T/F A long childhood is necessary for a larger brain to mature.
4. The human brain reaches 95% of its size by age \_\_\_\_  
a. 5 b. 11 c. 15 d. 18 e. 25

### **Neanderthals Overlapped with Modern Humans**

1. T/F Neanderthals and Modern Humans lived contemporaneously in Europe for about 1,000 years.
2. T/F Neanderthals were rapidly replaced by modern humans.
3. T/F There was ample time for interaction and interbreeding between Neanderthals and Modern Humans



4. What percent of Neanderthal DNA occurs in modern non-African human populations?  
a. Less than one percent b. 2-3 percent c. 5 percent d. none
5. T/F Neanderthals may have survived in dwindling populations in pockets of Europe before they became extinct.
6. T/F Rather than modern humans impacting the cultural practices of Neanderthals, there may have been regional differences in tool making and design.

### **Theory on Human Gestation Refuted**

1. What does the obstetric dilemma refer to?
2. T/F Hips wide enough to deliver a more developed baby would be a detriment to walking.
3. T/F Human gestation is relatively long compared to other primates.
4. T/F The primary evolutionary constraint on fetal growth and gestation is the Mom's energy.
5. T/F It would have been physiologically impossible regardless of pelvic anatomy to birth a more developed baby.