Unit 5: Later Hominids, Mesolithic, Neolithic, and Modern Issues

Reading:
Larsen, Chapters 11 (pp. 269-285), 12 and 13

Terminology:

Homo erectus sites:		
Zhoukoudian, China	East and West Turkana (Nariokotome), Africa	Olorgesailie, Africa
Trinil, Java (Eugene Dubois)		
Archaic Homo sapiens sites:		
Broken Hill/Kabwe	Bodo	Steinheim
Dali	Gran Dolina (Atapuerca)	
***Homo neanderthalensis* sites:**		
Neander Valley	La Chapelle aux Saints	Shanidar
Kebara/Tabun on Mt Carmel	Vindija	St. Cesaire
***Homo sapiens sapiens* sites:**		
Lascaux and Altamira	Lake Mungo/Kow Swamp	Klasies River Mouth
Qafzeh and Skhul	Cro Magnon	
Technology and Other:		
Oldowan	Acheulean	hand axes
Pleistocene	cultural adaptation	use of fire
Chatelperronian	Würm glacial period	Mousterian/Levallois technique
anatomically modern H. sapiens	Upper Paleolithic	blade technology
punch technique	Venus figurine	atl atl (spear thrower)
needles/tailored clothing	body ornaments, etc...	
Origins of Modern Humans:		
Out of Africa/Replacement model	Multiregional model	Assimilation model
Christopher Stringer	Ian Tattersall	Svante Paabo/Ed Green
mitochondrial DNA	molecular clock	nuclear DNA
After we became "modern":		
Mesolithic	Neolithic	population growth
health of farmers	health of hunter-gatherers	origins of agriculture
Know how to tell if a fossil is bipedal from its cranium, spine, os coxa, femur, and foot:		
foramen magnum	nuchal area	knee angle and condyle shape
os coxa size and shape	foot opposability, arch presence, heel strike	curve in spine?
Other traits important to hominid identification:		
post-orbital constriction	dental arcade (U-shaped or parabolic)	diastema

sagittal crest	zygomatic size/shape	tooth size/shape
cranial shape/forehead angle	brow ridge shape	sagittal ridge/keel
nuchal shape/occipital bun	cranial bone thickness	dental traits/tooth size
other facial characterisitcs—i.e. prognathism (projecting midface), presence of chin, etc.		

Study Questions:

1. Discuss and evaluate the specific archaeological evidence relating to the lifeways of Homo erectus.
2. Discuss and evaluate the specific archaeological evidence relating to the lifeways of archaic Homo sapiens.
3. Discuss and evaluate the specific archaeological evidence relating to the lifeways of Neanderthals.
4. Discuss and evaluate the specific archaeological evidence relating to the lifeways of modern humans.
5. Where did the later hominids live across the globe? You may want to make a map and practice identifying the different species' locations.
6. What is the evidence for the ability of Homo erectus and Neanderthals to speak? Do you think they were able to? Why or why not?
7. Who were the Neanderthals? What features define a classic Neanderthal (what cranial and postcranial skeletal features did they possess)? How are some of these features related to the environment in which they lived?
8. Construct a phylogeny for all the hominids. You may want to get a large piece of butcher paper and draw it out for yourself. Add in names, dates, culture name, and unique anatomical features. This is a great study aid!
9. Explain the two major models that seek to explain the origin and dispersal of Homo sapiens sapiens (Out of Africa and Multiregional). List two unique pieces of evidence used by each side to support their hypothesis. Which do you think is most accurate, and why? How does the Assimilation model relate to the other two models, and what new evidence gives it support?
10. How did the lives of humans change from the Upper Paleolithic, through the Mesolithic, and into the Neolithic? What kind of dietary shifts happened and what was the impact on their health and lifestyle?
11. What are the three most pressing issues that you see that may affect the health and future success of humans on earth?
12. Is natural selection still at work on our species? Give two examples of why or why not.

Be sure you know the trends in human evolution, the age, geographic distribution and distinguishing traits (physical and behavioral) for each hominid group. Remember--you will be asked to identify these hominids on your final exam, so be sure to learn traits that are distinctive and memorable. Also, the final is cumulative!