

Test Bank

CHAPTER 2: HUMAN EVOLUTION

Multiple Choice

1. A/an _____ provides a means for people to understand their place in the universe and the purpose of their lives.

- a. origin myth
- b. cosmology
- c. evolutionary theory
- d. fable

Ans: B

Learning Objective: 2.1: Explain how cosmologies regarding human origins differ from the scientific view of evolution.

Cognitive Domain: Comprehension

Answer Location: Theory of Evolution

Difficulty Level: Easy

2. Which of the following contains an origin myth?

- a. *Beowulf*
- b. Homer's *The Odyssey*
- c. Book of Genesis
- d. Aesop's fable *The Hare & the Tortoise*

Ans: C

Learning Objective: 2.1: Explain how cosmologies regarding human origins differ from the scientific view of evolution.

Cognitive Domain: Application

Answer Location: Western Origin Myths

Difficulty Level: Medium

3. What is the major difference between scientific and cosmological explanations?

- a. Cosmological explanations explain the world and scientific explanations do not.
- b. Scientific explanations contradict cosmological explanations.
- c. Cosmological explanations can be measured and scientific explanations cannot.
- d. Scientific explanations can be observed and cosmological explanations cannot.

Ans: D

Learning Objective: 2.2: Discuss how the scientific revolution provided the context for the theory of evolution.

Cognitive Domain: Application

Answer Location: The Scientific Revolution

Difficulty Level: Medium

4. Which idea led to a cosmology shift that ushered in the scientific revolution?
- a. The Earth is not the center of the universe.
 - b. Evolution results in changes in species through time.
 - c. Gravity is a force that acts on all items with mass.
 - d. God created the world in six days.

Ans: A

Learning Objective: 2.2: Discuss how the scientific revolution provided the context for the theory of evolution.

Cognitive Domain: Comprehension

Answer Location: The Scientific Revolution

Difficulty Level: Medium

5. A natural disaster that causes significant changes to a species' environment will impact each organism's ability to _____.

- a. evacuate and resettle elsewhere
- b. adapt using culture
- c. survive and reproduce
- d. develop new mutations

Ans: C

Learning Objective: 2.3: Explain how natural selection works.

Cognitive Domain: Comprehension

Answer Location: Examples of Natural Selection

Difficulty Level: Medium

6. Which evolutionary force relies on the existence of an incredible amount of difference among members of a species?

- a. mutations
- b. natural selection
- c. gene flow
- d. genetic drift

Ans: B

Learning Objective: 2.3: Explain how natural selection works.

Cognitive Domain: Application

Answer Location: Darwin, Wallace, and Natural Selection

Difficulty Level: Medium

7. How old is the universe?

- a. 13.8 billion years
- b. 4.6 billion years
- c. 3.6 billion years
- d. 6,000 years

Ans: A

Learning Objective: 2.3: Explain how natural selection works.

Cognitive Domain: Knowledge

Answer Location: The Evolution of Life

Difficulty Level: Easy

8. Which of the following describes the relationships between modern humans and modern apes?

- a. Modern humans descended from modern apes.
- b. Modern apes descended from modern humans.
- c. Modern humans and modern apes share a common ancestor.
- d. Modern apes are primates while modern humans are not.

Ans: C

Learning Objective: 2.3: Explain how natural selection works.

Cognitive Domain: Comprehension

Answer Location: The Evolution of Life

Difficulty Level: Medium

9. Some people summarize their understanding of natural selection as “survival of the fittest.” What would be a more accurate phrase?

- a. survival of the largest
- b. evolution of the fittest
- c. survival of the fiercest
- d. survival and reproduction of the fittest

Ans: D

Learning Objective: 2.3: Explain how natural selection works.

Cognitive Domain: Application

Answer Location: Darwin, Wallace, and Natural Selection

Difficulty Level: Medium

10. Which primate subfamily includes humans and gorillas, but not orangutans?

- a. Ponginae
- b. Homininae
- c. Homo
- d. Pan

Ans: B

Learning Objective: 2.4: Describe how early hominins are different from other primates.

Cognitive Domain: Knowledge

Answer Location: Hominin Evolution

Difficulty Level: Easy

11. What fossil evidence indicates bipedalism?

- a. small cranial capacity
- b. prominent, robust brow ridge
- c. hands with curved digits
- d. cranium situated atop spinal column

Ans: D

Learning Objective: 2.4: Describe how early hominins are different from other primates.

Cognitive Domain: Application

Answer Location: Hominin Evolution
Difficulty Level: Medium

12. What type of specimen is Lucy?

- a. *Australopithecus afarensis*
- b. *Homo sapiens*
- c. *Ardepithecus ramidus*
- d. *Homo naledi*

Ans: A

Learning Objective: 2.4: Describe how early hominins are different from other primates.

Cognitive Domain: Comprehension

Answer Location: Australopithecus

Difficulty Level: Medium

13. *H. floresiensis* is called _____ for its small size.

- a. the Imp
- b. Thumbelina
- c. the Hobbit
- d. Dobby

Ans: C

Learning Objective: 2.5: Discuss how *Homo habilis*, *Homo rudolfensis*, *Homo floresiensis*, and *Homo naledi* differ from australopithecines.

Cognitive Domain: Knowledge

Answer Location: Homo

Difficulty Level: Easy

14. Most members of the *Homo* lineage have a _____ cranial capacity than members of *Australopithecus*.

- a. smaller
- b. larger
- c. wider
- d. narrower

Ans: B

Learning Objective: 2.5: Discuss how *Homo habilis*, *Homo rudolfensis*, *Homo floresiensis*, and *Homo naledi* differ from australopithecines.

Cognitive Domain: Comprehension

Answer Location: Homo

Difficulty Level: Medium

15. The deposit of _____ at the Rising Star cave system in South Africa may represent the earliest example of intentional burial.

- a. *H. sapiens*
- b. *H. floresiensis*
- c. *H. rudolfensis*
- d. *H. naledi*

Ans: D

Learning Objective: 2.5: Discuss how *Homo habilis*, *Homo rudolfensis*, *Homo floresiensis*, and *Homo naledi* differ from australopithecines.

Cognitive Domain: Knowledge

Answer Location: Homo

Difficulty Level: Medium

16. Compared with Oldowan choppers, Acheulean tools were _____.

- a. more complex
- b. much simpler
- c. larger
- d. narrower

Ans: A

Learning Objective: 2.6: Discuss the cultural characteristics of *Homo erectus*.

Cognitive Domain: Comprehension

Answer Location: Acheulean Technology

Difficulty Level: Medium

17. Compared with anatomically modern *Homo sapiens*, *Homo erectus* were _____.

- a. very muscular
- b. more slender
- c. the same
- d. lacking in bipedalism

Ans: A

Learning Objective: 2.6: Discuss the cultural characteristics of *Homo erectus*.

Cognitive Domain: Comprehension

Answer Location: *Homo erectus*

Difficulty Level: Medium

18. Why do we find *H. erectus* spread so widely across the world?

- a. Earlier species of *Homo* evolved independently into *H. erectus* in many regions.
- b. *H. erectus* left Africa entirely and settled in many other regions of the world.
- c. Some *H. erectus* migrated out of Africa and adapted to many new environments.
- d. *H. erectus* went all over the world in search of fire.

Ans: C

Learning Objective: 2.6: Discuss the cultural characteristics of *Homo erectus*.

Cognitive Domain: Comprehension

Answer Location: Migration of *Homo erectus*

Difficulty Level: Medium

19. Which cultural feature was crucial to survival as *Homo erectus* spread?

- a. bipedalism
- b. fire

- c. agriculture
- d. sailing

Ans: B

Learning Objective: 2.6: Discuss the cultural characteristics of *Homo erectus*.

Cognitive Domain: Application

Answer Location: Fire

Difficulty Level: Medium

20. *Homo erectus* evolved _____ *Homo sapiens*.

- a. gradually into
- b. rapidly into
- c. independently from
- d. at the same time as

Ans: A

Learning Objective: 2.7: Describe the physical and cultural characteristics of Neandertals.

Cognitive Domain: Knowledge

Answer Location: Transition to *Homo sapiens*

Difficulty Level: Easy

21. Compared with modern humans, Neandertals were _____.

- a. much more intelligent
- b. a little bit more intelligent
- c. less intelligent
- d. equally intelligent

Ans: D

Learning Objective: 2.7: Describe the physical and cultural characteristics of Neandertals.

Cognitive Domain: Knowledge

Answer Location: Transition to *Homo sapiens*

Difficulty Level: Easy

22. Neandertals used _____ tools.

- a. Acheulean
- b. Mousterian
- c. Olduwan
- d. Denisovan

Ans: B

Learning Objective: 2.7: Describe the physical and cultural characteristics of Neandertals.

Cognitive Domain: Knowledge

Answer Location: Neandertal Technology: The Middle Paleolithic

Difficulty Level: Easy

23. If you were a paleoanthropologist who discovered new hominin fossils, what parts of the skeleton would be most useful in classifying the find into its appropriate genus and species?

- a. cranium and pelvis
- b. ribs and long bones
- c. spinal column and phalanges
- d. scapulae and clavicles

Ans: A

Learning Objective: 2.7: Describe the physical and cultural characteristics of Neandertals.

Cognitive Domain: Application

Answer Location: Transition to *Homo sapiens*

Difficulty Level: Hard

24. Which of the following best illustrates the relationship of anatomically modern humans to their closest relatives?

- a. a tree with limbs that divide into smaller and smaller branches
- b. a river with streams that wind back and forth and over one another
- c. a spiderweb with strands that each connect to every other strand
- d. a butterfly wing with abstract blotches and dots

Ans: B

Learning Objective: 2.7: Describe the physical and cultural characteristics of Neandertals.

Cognitive Domain: Application

Answer Location: Anatomically Modern *Homo sapiens*

Difficulty Level: Medium

25. The _____ model of evolutionary development emphasizes the roles of natural selection and gene flow to explain why *H. sapiens* groups in different areas have different physical features but remain the same species.

- a. replacement
- b. "Out of Africa"
- c. hybridization and assimilation
- d. multiregional

Ans: D

Learning Objective: 2.8: Discuss the three models of evolutionary development of modern humans.

Cognitive Domain: Application

Answer Location: Multiregional Evolutionary Model

Difficulty Level: Medium

26. The _____ model of evolutionary development asserts that *H. sapiens* evolved in Africa and spread from there, outcompeting archaic groups.

- a. replacement
- b. hybridization and assimilation
- c. multiregional

d. migration

Ans: A

Learning Objective: 2.8: Discuss the three models of evolutionary development of modern humans.

Cognitive Domain: Comprehension

Answer Location: Replacement Model

Difficulty Level: Medium

27. When two previously separate groups make contact and interbreed, _____ occurs and subsequent generations of the groups are more similar to one another.

a. mutations

b. genetic drift

c. gene flow

d. natural selection

Ans: C

Learning Objective: 2.8: Discuss the three models of evolutionary development of modern humans.

Cognitive Domain: Knowledge

Answer Location: Hybridization and Assimilation Models (gene flow is discussed earlier in the chapter, but the more useful definition is in this section)

Difficulty Level: Easy

28. The _____ model of evolutionary development takes into account the immense complexity of human behavior.

a. hybridization and assimilation

b. replacement

c. multiregional

d. single-source

Ans: A

Learning Objective: 2.8: Discuss the three models of evolutionary development of modern humans.

Cognitive Domain: Comprehension

Answer Location: Hybridization and Assimilation Models

Difficulty Level: Medium

29. Which period refers to the last part of the Old Stone Age?

a. Lower Paleolithic

b. Middle Paleolithic

c. Mesopaleolithic

d. Upper Paleolithic

Ans: D

Learning Objective: 2.9: Describe the cultural features of the Upper Paleolithic.

Cognitive Domain: Knowledge

Answer Location: Modern *Homo sapiens* Culture: The Upper Paleolithic

Difficulty Level: Easy

30. Which stone tool type is characteristic of the Upper Paleolithic period?

- a. blades
- b. choppers
- c. hammer stones
- d. axes

Ans: A

Learning Objective: 2.9: Describe the cultural features of the Upper Paleolithic.

Cognitive Domain: Knowledge

Answer Location: Modern *Homo sapiens* Culture: The Upper Paleolithic

Difficulty Level: Easy

31. Paleo-Indians in the Amazonian region did not hunt large animals, but rather relied on _____ for their subsistence.

- a. salamanders, insects, and frogs
- b. monkeys, parrots, and leopards
- c. fish, birds, and turtles
- d. nuts, seeds, and berries

Ans: C

Learning Objective: 2.9: Describe the cultural features of the Upper Paleolithic.

Cognitive Domain: Knowledge

Answer Location: Upper Paleolithic Hunters in America

Difficulty Level: Easy

32. Upper Paleolithic foragers were able to migrate to nearly every part of the world by _____.

- a. sailing across the oceans in dugout canoes
- b. walking across land masses that are covered in water today
- c. climbing across glaciers that connected the continents
- d. creating floating islands that could be towed by boat

Ans: B

Learning Objective: 2.9: Describe the cultural features of the Upper Paleolithic.

Cognitive Domain: Comprehension

Answer Location: Migration of Upper Paleolithic Humans

Difficulty Level: Medium

33. The presence of different skin colors among humans is the result of _____.

- a. natural selection
- b. genetic drift
- c. gene flow
- d. interbreeding

Ans: A

Learning Objective: 2.10: Discuss the factors of natural selection that influence skin color differences in modern humans.

Cognitive Domain: Comprehension

Answer Location: Skin Color

Difficulty Level: Easy

34. Genetic data shows that racism is _____.

- a. justified
- b. unjustified
- c. scientifically based
- d. morally based

Ans: B

Learning Objective: 2.10: Discuss the factors of natural selection that influence skin color differences in modern humans.

Cognitive Domain: Comprehension

Answer Location: Skin Color

Difficulty Level: Medium

35. Genetic data shows that _____ skin color/s evolved in Africa.

- a. neither light nor dark
- b. only light
- c. only dark
- d. both light and dark

Ans: D

Learning Objective: 2.10: Discuss the factors of natural selection that influence skin color differences in modern humans.

Cognitive Domain: Knowledge

Answer Location: Skin Color

Difficulty Level: Easy

True/False

1. Natural selection repeated over and over leads to species change.

Ans: T

Learning Objective: 2.3: Explain how natural selection works.

Cognitive Domain: Knowledge

Answer Location: Darwin, Wallace, and Natural Selection

Difficulty Level: Easy

2. Paleoanthropological research focuses on the search for the “missing link,” a species thought to connect human ancestors to other primates.

Ans: F

Learning Objective: 2.4: Describe how early hominins are different from other primates.

Cognitive Domain: Comprehension

Answer Location: Hominin Evolution

Difficulty Level: Medium

3. The earliest definitive stone tools, found at Lake Turkana, were made by members of the genus *Homo*.

Ans: F

Learning Objective: 2.5: Discuss how *Homo habilis*, *Homo rudolfensis*, *Homo floresiensis*, and *Homo naledi* differ from australopithecines.

Cognitive Domain: Application

Answer Location: Early Stone Tools: The Lower Paleolithic

Difficulty Level: Medium

4. There is evidence for interbreeding among Neandertals, Denisovans, and humans.

Ans: T

Learning Objective: 2.7: Describe the physical and cultural characteristics of Neandertals.

Cognitive Domain: Knowledge

Answer Location: Transition to *Homo sapiens*

Difficulty Level: Easy

5. There is more variation within each race than between the races.

Ans: T

Learning Objective: 2.10: Discuss the factors of natural selection that influence skin color differences in modern humans.

Cognitive Domain: Application

Answer Location: Skin Color

Difficulty Level: Medium

Essay

1. Why do people have characteristics that seem to be a blend of their parents' characteristics when we know that genes are passed down as discrete units?

Ans: Many traits are polygenic, in that they come from multiple genes rather than just one. While single-gene traits will express as either the dominant or recessive form based on the alleles received from the parents, polygenic traits may express as anywhere along a series or spectrum since the offspring receives several genes that affect the phenotype.

Learning Objective: 2.3: Explain how natural selection works.

Cognitive Domain: Analysis

Answer Location: Principles of Inheritance

Difficulty Level: Hard

2. Discuss the evidence for and against the stereotypical depiction of Neandertals as brutish, stupid "cave men."

Ans: Neandertals did have very prominent brow ridges and large, broad faces and jaws. They did in fact live in caves at least for part of the year. Other than that, most of the evidence is against the idea of Neandertals as stupid. Cranial capacity indicates that Neandertal brains were at least as large as that of modern humans, indicating the potential for humanlike intellectual capacity. They used complex tools rather than the rough stone tools usually depicted in cartoons and

popular culture. There is evidence that humans and Neandertals mated, which may indicate some further similarity. Finally, Neandertals intentionally buried their dead and cared for the disabled, indicating a level of compassion and cognition not usually attributed to “cave men.”

Learning Objective: 2.7: Describe the physical and cultural characteristics of Neandertals.

Cognitive Domain: Analysis

Answer Location: Transition to *Homo sapiens* (many sections)

Difficulty Level: Hard

3. Which types of anthropologists have contributed to the consensus that Native Americans are the descendants of migrants from Asia? What types of evidence has each contributed?

Ans: Evidence that Native Americans are descended from people who migrated from Asia include DNA, blood type, and tooth shape similarities, which are studied by biological anthropologists. Archaeologists have contributed their understanding of artifacts such as cut marks on animal bones. Linguistic studies have traced the relationships between Native American and Asian languages.

Learning Objective: 2.9: Describe the cultural features of the Upper Paleolithic.

Cognitive Domain: Application

Answer Location: Upper Paleolithic Hunters in America

Difficulty Level: Hard

4. Why do paleoanthropologists also study modern foragers? What are the advantages and disadvantages of using ethnographic analogy to study past societies?

Ans: Paleoanthropologists study modern foraging societies to attempt to reconstruct Paleolithic foraging social organization. Since the preservation of data from Paleolithic sites is often bad, there isn't necessarily enough data to say something meaningful about Paleolithic social organization. The second best strategy is to investigate modern societies of a similar size and subsistence strategy to get ideas about how these past groups may have lived. Data from modern foraging societies is plentiful. However, it isn't necessarily true that modern and Paleolithic foraging societies have much in common, since they lived in very different environments and modern societies have had contact with many other types of society.

Learning Objective: 2.9: Describe the cultural features of the Upper Paleolithic.

Cognitive Domain: Analysis

Answer Location: Upper Paleolithic Subsistence and Social Organization

Difficulty Level: Hard

5. Why is there so much physical variation in modern *Homo sapiens* populations?

Ans: As humans spread across the world in the Paleolithic, they settled in a wide variety of environments. Each group experienced natural selection that led to different physical features. They also experienced genetic drift, and since many

of these groups were isolated from one another, variation in physical features developed a bit differently in each place.

Learning Objective: 2.9: Describe the cultural features of the Upper Paleolithic.

Cognitive Domain: Application

Answer Location: Physical Variation in Modern Humans

Difficulty Level: Hard