

Human evolution

1. Which one of the following lines of evidence suggests that Neanderthals are related to modern humans?

- a) the discovery of the remains of Cro-Magnons and Neanderthals living close to each other at the same time
- b) DNA evidence that shows that Neanderthal DNA is no more similar to that of Europeans than to that of Asians or Africans
- c) the DNA from the breastbone of a Neanderthal baby was distinct from that of modern humans
- d) the continuing presence of Neanderthal traits thousands of years after Neanderthals had disappeared
- e) None of these lines of evidence suggest that Neanderthals are related to modern humans.

2. Lorises and humans share all of the following traits except

- a) an opposable big toe
- b) depth perception
- c) an opposable thumb
- d) a short snout
- e) eyes facing forward

3. Prehensile tails are found among

- a) prosimians
- b) Old World monkeys
- c) baboons
- d) New World monkeys
- e) gibbons

4. The oldest known primate group is the

- a) australopithecines



- b) anthropoids
- c) gibbons
- d) prosimians
- e) hominids

5. *Natural populations of lemurs are found only in*

- a) Borneo.
- b) North Africa
- c) New Zealand
- d) Madagascar
- e) Tasmania

6. *A prehensile tail is like a prehensile thumb in that both*

- a) Evolved before the anthropoids
- b) are used for grasping
- c) can be fully bent in any direction
- d) are vestigial organs
- e) are characteristics of prosimians

7. *Prosimians differ from anthropoids in that prosimians*

- a) are more reliant on their eyesight
- b) are more reliant on their sense of smell
- c) currently have a wider geographic distribution
- d) have a larger brain relative to their body size
- e) arose more recently

8. *Which of the following groups are not prosimians?*

- a) pottos
- b) bonobos
- c) lemurs

- d) tarsier
- e) lorises

9. Which of the following groups are not anthropoids?

- a) baboons
- b) gorillas
- c) humans
- d) monkeys
- e) lemurs

10. The apes whose behavior most resembles human behavior are the

- a) gibbons
- b) orangutans
- c) gorillas
- d) chimpanzees
- e) baboons

11. Which of the following are known to use tools?

- a) gibbons
- b) gorillas
- c) chimpanzees
- d) monkeys
- e) tarsiers

12. All of the ape species inhabit tropical rain forests. The group that is unusual in that individuals spend almost all of their time on the ground, instead of in trees, is the

- a) gibbons
- b) orangutans
- c) gorillas
- d) chimpanzees
- e) baboons



13. Of all the great apes, bonobos are the most sexually promiscuous, often mating with several different partners in a single day. The only group that establishes monogamous relationships, with mated pairs remaining together for life, are the

- a) gibbons
- b) orangutans
- c) gorillas
- d) chimpanzees
- e) baboons

14. The animals most closely related to humans are the

- a) gibbons
- b) orangutans
- c) gorillas
- d) chimpanzees
- e) hanuman langurs

15. Which of the following statements most accurately reflects our understanding of human evolution?

- a) Humans evolved from chimpanzees.
- b) Humans and chimpanzees have a common ancestor and are more closely related to each other than they are to any of the other anthropoids.
- c) Humans and chimpanzees evolved from gorillas.
- d) Humans and chimpanzees evolved from gibbons.
- e) Humans evolved from gibbons; chimpanzees evolved from orangutans.

16. Human DNA and chimpanzee DNA

- a) differ by less than 1%
- b) differ by more than 10%
- c) are virtually identical
- d) differ by the same amount that human DNA differs from gorilla DNA



- e) differ by less than 3%

17. The hominid lineage diverged from the lineage that gave rise to modern apes between

_____ years ago.

- a) 1 million and 2 million
- b) 6,000 and 8,000
- c) 6 million and 8 million
- d) 1.5 billion and 2.5 billion
- e) The hominid lineage does not share a common ancestor with the ape lineage

18. Which one of the following is not one of the five major features to emerge in the evolution of humans?

- a) bipedal posture
- b) monogamy
- c) increased brain size
- d) reduced difference between the sexes
- e) shorter jaws, flatter faces, and pronounced chins

19. Of the following, which is the first distinctively hominid trait to appear in the fossil record?

- a) an opposable thumb
- b) a cranium and brain much larger relative to body size than those of apes
- c) upright walking
- d) considerable loss of body hair
- e) eyes set close together in the front of the face

20. What is the significance of the *A. afarensis* fossil with the nickname Lucy?

- a) Mitochondrial DNA analysis has shown her to be a direct ancestor of modern humans.
- b) She is one of the most complete known skeletons of an australopithecine.

- c) She is a representative of the first hominids to use tools.
- d) She is the earliest known fossil of a clearly bipedal hominid.
- e) She is the oldest known hominid fossil.

21. Clearly bipedal hominid fossils date to about _____years ago.

- a) 1 million
- b) 100,000
- c) 4 million
- d) 2 million
- e) 50,000

22. *The oldest known hominid species for which there is evidence of tool use is*

- a) *Homo sapiens*.
- b) *Australopithecus afarensis*.
- c) *Homo erectus*.
- d) *Ardipithecus ramidus*.
- e) *Homo habilis*.

23. Which of the following statements about *Homo erectus* is not true?
Homo erectus

- a) fossils range in age from 1.8 million to 500,000 years ago
- b) was shorter than *Homo habilis*
- c) had a larger brain than *Homo habilis*
- d) males were about 1.2 times the size of females in the same population
- e) lived in huts or caves, built fires, wore clothes made of animal skins, and designed more elaborate tools than those of *Homo habilis*

24. _____gave rise to *Homo sapiens*.

- a) *Ardipithecus afarensis*
- b) *Homo habilis*
- c) *Ardipithecus ramidus*
- d) *Homo erectus*
- e) *Australopithecus afarensis*



25. According to the fossil record, the genus Homo first arose in

- a) North America.
- b) Europe.
- c) Asia.
- d) Africa.
- e) Australia.

26. The earliest hominid to be found outside of Africa belongs to which species?

- a) Ardipithecus ramidus
- b) Ardipithecus afarensis
- c) Homo habilis
- d) Homo erectus
- e) Homo sapiens

27. Which of the following types of study has yielded results that support the replacement hypothesis of the origin of humans?

- a) studies of the distribution of "Lucy"-like fossils
- b) studies comparing the distributions of australopithecine and H. *erectus* fossils
- c) studies of fossilized Neanderthal DNA
- d) studies of mitochondrial DNA among living human populations
- e) comparative studies of the mitochondrial DNA of H. *sapiens* and H. *erectus*

28. Studies of genetic diversity suggest that modern humans diversified about _____ years ago.

- a) 5,000
- b) 50,000
- c) 100,000
- d) 500,000
- e) 1,000,000

29. Which one of the following is the hypothesis about the evolution of

modern humans that is best supported by genetic studies?

- a) replacement hypothesis
- b) *Homo erectus* hypothesis
- c) multiregional hypothesis
- d) large brain, then upright posture hypothesis
- e) None of the choices are correct.

30. Which one of the following is a major milestone of human evolution that is most directly related to the development of culture?

- a) upright posture
- b) enlarged brain
- c) prolonged parental care
- d) loss of body hair
- e) grasping thumb

31. Which of the following is not considered a major milestone in the evolution of Homo sapiens?

- a) the evolution of a prolonged period of parental care
- b) the evolution of a grasping thumb
- c) the evolution of an upright stance
- d) the evolutionary enlargement of the brain
- e) All of the choices are considered major milestones in the evolution of *Homo sapiens*.

32. When hominids first began to employ a diversity of worked tools, which of the following modes of food acquisition, previously little used, became open to exploitation?

- a) gathering wild fruits and seeds
- b) gathering wild roots
- c) scavenging
- d) hunting
- e) agriculture

33. It was only _____years ago that hunting became a major food-providing activity of members of the genus Homo.

- a) 50,000
- b) 30,000
- c) 100,000
- d) 300,000
- e) 250,000

34. Agriculture is considered the _____major stage of human culture.

- a) first
- b) second
- c) third
- d) fourth
- e) fifth

35. Today, much of the Fertile Crescent is

- a) a nature preserve
- b) farmland
- c) forest
- d) desert
- e) under water

36. Overgrazing by domestic animals likely led to the

- a) maintenance of the North American prairie
- b) surplus of meat animals in Africa
- c) fertility of the Fertile Crescent
- d) extinction of *Homo habilis*
- e) creation of deserts

37. The Fertile Crescent is in

- a) Asia
- b) Australia
- c) North America
- d) Europe



- e) the Middle East

38. Human groups known or strongly suspected to have caused major environmental changes or extinctions include

- a) scavenger *Homo habilis* in Africa
- b) hunter *Homo sapiens* in Australia
- c) hunter *Homo sapiens* in North America
- d) farmer *Homo sapiens* in the Middle East
- e) All of the choices are correct

39. Which of the following was not a major factor in the desertification of the Fertile Crescent?

- a) overgrazing
- b) destruction of sod by early plows
- c) deforestation
- d) farming practices that removed nutrients from the soil faster than they were returned
- e) All of the choices were contributing factors.

40. In which of the following ways do you differ greatly from your ancestors of 100,000 years ago?

- a) You are more intelligent.
- b) You use language.
- c) You use tools.
- d) You have access to a larger store of accumulated knowledge.
- e) All of the choices are correct.

41. Which of these primates is a prosimian?

- a) lemur
- b) spider monkey
- c) baboon
- d) chimpanzee

e) gorilla

42. Which of these is an Old World monkey?

- a) spider monkey
- b) loris
- c) baboon
- d) human
- e) chimpanzee

43. Which of these groups is characterized by animals that lack tails and have forelimbs that are longer than their hind limbs?

- a) apes
- b) Old World monkeys
- c) New World monkeys
- d) prosimians
- e) baboons

44. Which hominid appears to have been the first to use simple stone tools?

- a) Homo erectus
- b) Homo habilis
- c) Ardipithecus
- d) Homo sapiens
- e) Australopithecus

45. Which of these hominids evolved earliest?

- a) Australopithecus
- b) Homo erectus
- c) Ardipithecus
- d) Homo habilis
- e) Homosapiens

