

Chapter  
**16****Primate Evolution****Chapter Assessment****Reviewing Vocabulary**

Complete the paragraphs by writing the correct term on the appropriate line. Use these choices:

haplorhines      bipedal      australopithecines      Neandertals      primates  
hominids      prehensile tail      opposable thumb      Cro-Magnon

A distinctive characteristic of humans is **(1)** \_\_\_\_\_ locomotion, the ability to walk on two legs in an upright position. Another characteristic that humans share with most **(2)** \_\_\_\_\_ is the ability to touch the thumb to the forefinger. Called the **(3)** \_\_\_\_\_, it permits objects to be tightly grasped.

Anthropologists are also concerned with the origin of humans. Primates are classified in two groups, the strepsirrhines and the **(4)** \_\_\_\_\_. The strepsirrhines are small-bodied and include the lemurs and pottos. The other group can be divided into Old World monkeys, New World monkeys, and hominoids. Hominoids include the humanlike, bipedal primates such as the apes, chimpanzees, and gorillas. New World monkeys are entirely arboreal. Their success in the tree tops can be partially attributed to their **(5)** \_\_\_\_\_, which functions almost like an extra hand, enabling them to tightly grasp branches.

Modern humans and humanlike fossils are classified as **(6)** \_\_\_\_\_. Based on fossil evidence and biochemical evidence, it is believed that apes and humans began to evolve about 30 million years ago, developing along different paths but arising from the same common ancestor. In 1924, Raymond Dart discovered a skull with both apelike and human characteristics. The skull derived from the first of several African primates, now collectively referred to as **(7)** \_\_\_\_\_, which show both humanlike and apelike qualities. *Homo sapiens* may have first appeared between 100 000 and 500 000 years ago. The first of the species to have communicated through spoken language appeared around 100 000 years ago. They have been named **(8)** \_\_\_\_\_. About 35 000 years ago, these disappeared from the fossil record as a group called **(9)** \_\_\_\_\_ evolved.

In your textbook, read about how living things are classified.

Examine the table showing the classification of four organisms. Then answer the questions.

Taxon	Green Frog	Mountain Lion	Domestic Dog	Human
Kingdom	Animalia	Animalia	Animalia	Animalia
Phylum	Chordata	Chordata	Chordata	Chordata
Class	Amphibia	Mammalia	Mammalia	Mammalia
Order	Anura	Carnivora	Carnivora	Primates
Family	Ranidae	Felidae	Canidae	Hominidae
Genus	<i>Rana</i>	<i>Felis</i>	<i>Canis</i>	<i>Homo</i>
Species	<i>Rana clamitans</i>	<i>Felis concolor</i>	<i>Canis familiaris</i>	<i>Homo sapiens</i>

16. Which taxon includes the most specific characteristics? \_\_\_\_\_

17. Which taxon includes the broadest characteristics? \_\_\_\_\_

18. Which taxon includes more species, an order or a family? \_\_\_\_\_

19. Which taxon includes only organisms that can successfully interbreed? \_\_\_\_\_

20. If two organisms belong to the same family, what other taxonomic groups do the organisms have in common.

\_\_\_\_\_

21. Which two organisms in the chart are most closely related? Explain.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

22. To which taxa do all four organisms belong?

\_\_\_\_\_

23. Which class does not include animals that have hair or fur? \_\_\_\_\_

24. What is the order, family, and genus of a human?

\_\_\_\_\_

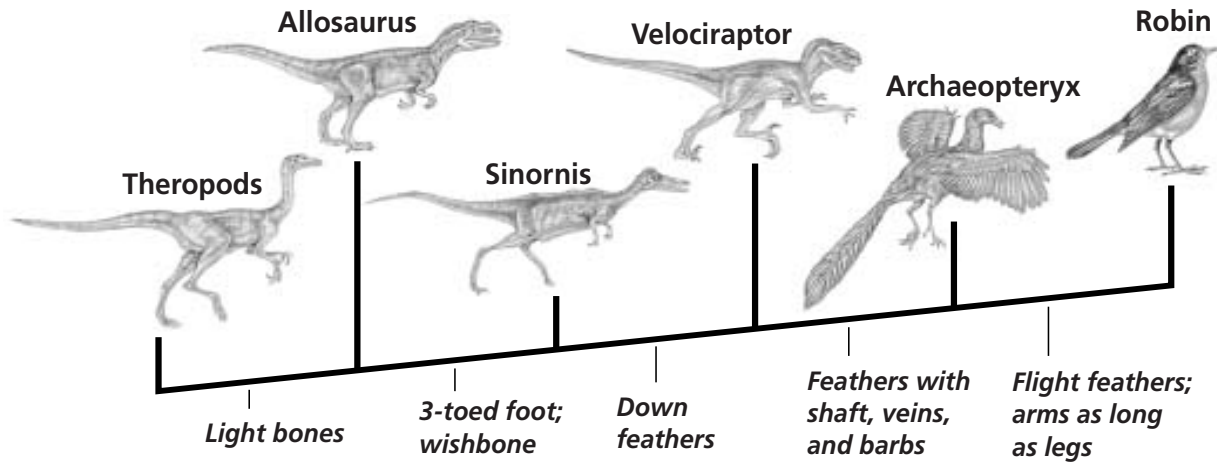
25. Using the information in the chart, what can you conclude about the classification taxa of an organism with the scientific name *Rana temporaria*?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Use the cladogram to answer the questions.



6. What five probable ancestors of the modern bird (robin) are shown on the cladogram?

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7. Which dinosaur is probably the most recent common ancestor of *Velociraptor* and *Archaeopteryx*?

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8. Which traits shown on the cladogram are shared by *Archaeopteryx* and modern birds?

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