

CHAPTER

36

DIRECTED READING

# Mammals

## ► Section 36-1: The Mammalian Body

### Mammals Share Five Key Characteristics

*Complete each statement by writing the correct term or phrase in the space provided.*

1. A(n) \_\_\_\_\_ is a filament composed mainly of dead cells filled with the protein keratin.
2. The primary function of hair is \_\_\_\_\_ .

### Mammals Have Diverse, Specialized Teeth

*Read each question, and write your answer in the space provided.*

3. What are the four types of teeth in mammals?

---

---

---

---

---

4. What are the two sets of teeth in mammals?

---

---

---

---

---

5. Why do mammals have more efficient teeth than do reptiles?

---

---

---

---

---

## Mammals Maintain a High Body Temperature

Read each question, and write your answer in the space provided.

6. What are three benefits that mammals derive from being endothermic?

---

---

---

7. Why have mammals evolved very efficient circulatory and respiratory systems?

---

---

---

8. Why is the four-chambered heart with a septum that completely divides the ventricle an efficient structure for circulating blood?

---

---

---

9. How do grizzly bears reproduce?

---

---

Complete each statement by writing the correct term or phrase in the space provided.

10. Respiration in mammals is aided by the \_\_\_\_\_, a sheet of muscle that separates the chest cavity from the abdominal cavity.
11. In mammalian lungs, the individual \_\_\_\_\_ are small and numerous, increasing the surface area for the diffusion of gases.

## Mammals Nurse and Care for Their Young

Complete each statement by writing the correct term or phrase in the space provided.

12. A nutrient-rich energy source called milk is produced in the \_\_\_\_\_ of mammals.
13. \_\_\_\_\_ occurs when mammalian mothers stop nursing their young.

## ► Section 36-2: Today's Mammals

### Mammals Have the Most Diverse Body Form of All Vertebrates

Mark each statement below T if it is true or F if it is false.

- \_\_\_\_\_ 1. Bats are mammals that fly.
- \_\_\_\_\_ 2. Whales are mammals that live in oceans.
- \_\_\_\_\_ 3. Whales have gills that absorb oxygen from the water.
- \_\_\_\_\_ 4. Bats and whales both use echolocation to navigate in the dark.

### Mammals Reproduce in One of Three Ways

Complete each statement by underlining the correct term or phrase in the brackets.

- 5. A [platypus / lizard] is an example of a monotreme.
- 6. Monotremes reproduce by [laying eggs / giving birth to fully developed young].
- 7. Female monotremes [have / do not have] nipples.
- 8. Female monotremes [have / do not have] mammary glands.
- 9. [Spiny anteaters / Opossums] are monotremes.

Read each question, and write your answer in the space provided.

10. Describe the birth and development of young marsupials.

---

---

---

---

11. Why are marsupials found only in Australia and New Guinea?

---

---

---

---

12. What is the function of the placenta?

---

---

---

---

## Most of Today's Mammals Are Placental

Write the correct placental mammal from the list below in the space next to its characteristics.

apes  
bats  
dogs  
elephants

horses  
manatees  
pigs  
rabbits

rodents  
seals  
shrews  
whales

- \_\_\_\_\_ 13. small, intelligent, with two pairs of large, curving incisor teeth that grow continuously
- \_\_\_\_\_ 14. capable of true flight; hang upside down during the day
- \_\_\_\_\_ 15. eat mainly insects
- \_\_\_\_\_ 16. strong, intelligent, successful hunters; long, canine teeth
- \_\_\_\_\_ 17. marine carnivores that feed at sea but return to land to mate, rear their young, and rest
- \_\_\_\_\_ 18. flexible, grasping hands and feet; exceptional ability to learn
- \_\_\_\_\_ 19. hoofs with an even number of toes; chew their cud
- \_\_\_\_\_ 20. hoofs with an odd number of toes; do not chew their cud
- \_\_\_\_\_ 21. streamlined bodies; front limbs modified into flippers; blowhole located on top of the head
- \_\_\_\_\_ 22. have one pair of long, continuously growing incisors; long hind legs
- \_\_\_\_\_ 23. barrel-shaped, marine, and graze on aquatic plants
- \_\_\_\_\_ 24. nose and upper lip modified into a trunk that is used for a variety of tasks