

Reptiles, Birds, and Mammals Study Guide

Answer the following questions on another sheet of paper. These will be your notes.

Reptiles Pages 772-783

General Characteristics

1. Reptiles belong to what class?
2. Reptiles replaced which group of animals as the dominant terrestrial vertebrates?
3. How many legs do most reptiles have?
4. How are the legs of reptiles different from those of the amphibians?
5. Which reptiles are legless?
6. Describe the toes of reptiles and how do they assist the reptile to life on land?
7. What type of metabolism is present in reptiles?
8. How do animals that have this type of metabolism heat their bodies? How do they cool down?
9. Compare the air temperature fluctuation with a lizard's body temperature using figure 2 on page 773. Answer the following questions.
 - a. What happens to body temperature when air temperature increases at sunrise?
 - b. Where does the lizard go when the sun is not shining?
 - c. What happens to the lizard's body temperature when the sun goes down?
 - d. What happens to the lizard's body temperature when the sun is shining?
 - e. Why does this occur?
10. Describe the skin of a reptile.
11. How does this kind of skin benefit life on land?
12. How do reptiles overcome the problem of sperm and egg drying out on land?
13. What does an amniotic egg contain to prevent the fertilized egg from drying out?
14. Describe the shell of a reptile's egg?
15. What is the function of the amnion?
16. What is the function of the yolk sac?
17. What is the function of the allantois?
18. What is the function of the chorion?
19. How does the structure of the lungs aid in the gas exchange efficiency in reptiles?
20. All reptiles, except crocodiles, have how many chambers in their heart?

21. Crocodiles have how many chambers in their heart?
22. What type of fertilization is exhibited in reptiles?
23. Define oviparous.
24. Define ovoviviparous.
25. What is the advantage of being ovoviviparous?
26. List the 7 main characteristics of all reptiles.

Snakes and Lizards

27. What is the name of the world's largest snake?
28. Snakes and lizards belong to what order?
29. What is the main characteristic of animals in this order?

Lizards

30. List some common lizards.
31. What do most lizards eat?
32. Which family of lizards are typically the largest?
33. Name the largest lizard.
34. Why do some lizards lose their tails?

Snakes

35. Snakes lack _____ eyelids and _____ ears.
36. What is molting?
37. What adaptation do the jaws of snakes exhibit?
38. What is a constrictor and how does it subdue its prey?
39. Name some snakes that are constrictors.
40. Do snakes have teeth for chewing?
41. What is venom?
42. List the 4 families of venomous snakes.
43. How do venomous snakes inject venom into their victims?
44. Read Up Close: Timber Rattlesnake. What does the Jacobson's organ do?

Turtles and Tortoises

45. Turtles and tortoises belong to which order?
46. What is the major difference between turtles and tortoises?
47. What is the carapace?
48. What is the plastron?
49. Do turtles and tortoises have teeth?

50. What do most turtles and tortoises eat?

Crocodiles and Alligators

51. What is the order to which the crocodiles and alligators belong?

52. List some members of this order.

53. How is the crocodilian head arrangement beneficial to their feeding strategies?

54. How are crocodilian mothers different from other living reptile mothers?

55. How are crocodiles different from alligators?

Tuataras

56. How many living species of tuataras are still in existence?

57. Why are tuataras called “living fossils”?

Birds pages 784-792

General Characteristics

1. What class do birds belong to?

2. Birds lack _____ and have a _____ that is greatly reduced in length.

3. Name 2 characteristics that birds share with reptiles.

4. List 2 characteristics that are unique to birds.

5. How are reptilian scales and bird feather similar to one another?

6. Describe contour feather and what is their function?

7. Where on the bird are flight feathers found?

8. What is a barb?

9. What is a barbule?

10. List 2 reasons that birds preen?

11. What is secreted from the preen gland?

12. What is the function of the down feathers?

13. Besides flight, list some other functions of the bird's feathers.

14. What is so special about the bones of birds?

15. What type of metabolism do birds exhibit?

16. Define endothermic.

17. How many chambers do the hearts of birds have?

18. What makes the lungs of birds more efficient than the reptilian lung?

19. What 3 characteristics provide birds with enough energy to fly?

20. Read Up Close: Bald Eagle. What is a talon?

21. Nitrogenous waste is converted to _____ acid and released as a white paste.
22. The largest group of terrestrial vertebrates are known by the common name of _____?
23. Habitat and diet of birds can be determined by looking at what 3 structures on the bird?
24. List the 7 main types of birds, the types of beaks they have, and their foot adaptation. (Make a chart)
25. Name a flightless bird that have wings that are adapted to swimming rather than flying.
26. Gulls and terns have what adaptation to allow for flying over bodies of water in search of fish?
27. What adaptation does an owl have?
28. List the 6 main characteristics of all birds.

Mammals page 800-816

General Characteristics

1. Where do most mammals live?
2. What mammalian organ allows mammals to retain water more efficiently than other animals?
3. List the 4 main characteristics of all mammals.
4. What is hair?
5. What are some functions of mammalian hair?
6. What are milk teeth?
7. What is the function of teeth?
8. List the 4 types of teeth and their functions.
9. What can be determined by looking at mammalian teeth?
10. How do mammals maintain body temperature?
11. What 2 structures make the mammalian respiratory system the most efficient?
12. How many chambers does the mammalian heart have?
13. What are mammary glands?
14. What are some of the important nutrients in mammalian milk?
15. What is weaning?
16. How long do mammalian mother care for their young?

17. Do mammalian fathers help raise the young?
18. Which mammalian group gives the longest parental care?
19. What is echolocation?
20. Which mammals use echolocation?
21. All mammals use _____ fertilization.
22. How many main groups of mammals are there?
23. What characteristic is used to group mammals?
24. What are the most primitive mammals?

Monotremes

25. What order do these mammals belong to?
26. Where do the monotremes live?
27. Name the only 3 examples of monotremes that are still living?
28. What is the unique characteristic of the monotremes?
29. Name 2 characteristics that monotremes have that are similar to other mammals?

Marsupials

30. Order Marsupialia include which common examples?
31. Describe typical marsupial young development.
32. What is a marsupium?
33. Where do most marsupials live?

Placental Mammals

34. Describe the young development of a placental mammal.
35. What is the function of the placenta?
36. What is meant by gestation period?
37. What is the function of antlers?
38. List the 12 most common orders of mammals, give examples, and distinguishing characteristics of each order.
39. What is an ungulate?
40. What is a cud?