

Chapter 31 Reptiles and Birds

Section 31–1 Reptiles (pages 797–805)



TEKS FOCUS: 5A Epithelia, muscles, bones; 5B Differentiation; 7A Embryology; 7B Adaptation; 8C Animal kingdom; 10A Body systems; 11A Feedback and homeostasis; **TEKS SUPPORT:** 8A Classification

This section describes the characteristics of reptiles and how reptiles are adapted to life on land. It also tells about the four orders of reptiles.

What Is a Reptile? (page 797)

- List three characteristics shared by all reptiles.
 - _____
 - _____
 - _____
- What is the disadvantage of reptilian scaly skin? _____

Evolution of Reptiles (pages 798–799)

- Circle the letter of each sentence that is true about the evolution of reptiles.
 - Reptiles evolved rapidly in the warm, humid climate of the Carboniferous Period.
 - Mammal-like reptiles dominated many land habitats until near the end of the Triassic Period.
 - All dinosaurs were enormous.
 - Some dinosaurs may have had feathers.
- Is the following sentence true or false? The extinction of dinosaurs opened up new niches on land and in the sea, providing opportunities for other kinds of organisms to evolve.

Form and Function in Reptiles (pages 800–802)

- How do ectotherms control their body temperature? _____

- Is the following sentence true or false? All reptiles are herbivores. _____
- Circle the letter of each adaptation reptiles have for respiration.
 - lungs
 - moist skin
 - strong rib muscles
 - gill slits
- Circle the letter of each sentence that is true about circulation in reptiles.
 - Reptiles have a double-loop circulatory system.
 - All reptile hearts have only one atrium.
 - Most reptiles have one ventricle with partial internal walls.
 - Crocodiles have the least developed heart of living reptiles.

9. What is the advantage of uric acid to terrestrial reptiles? _____

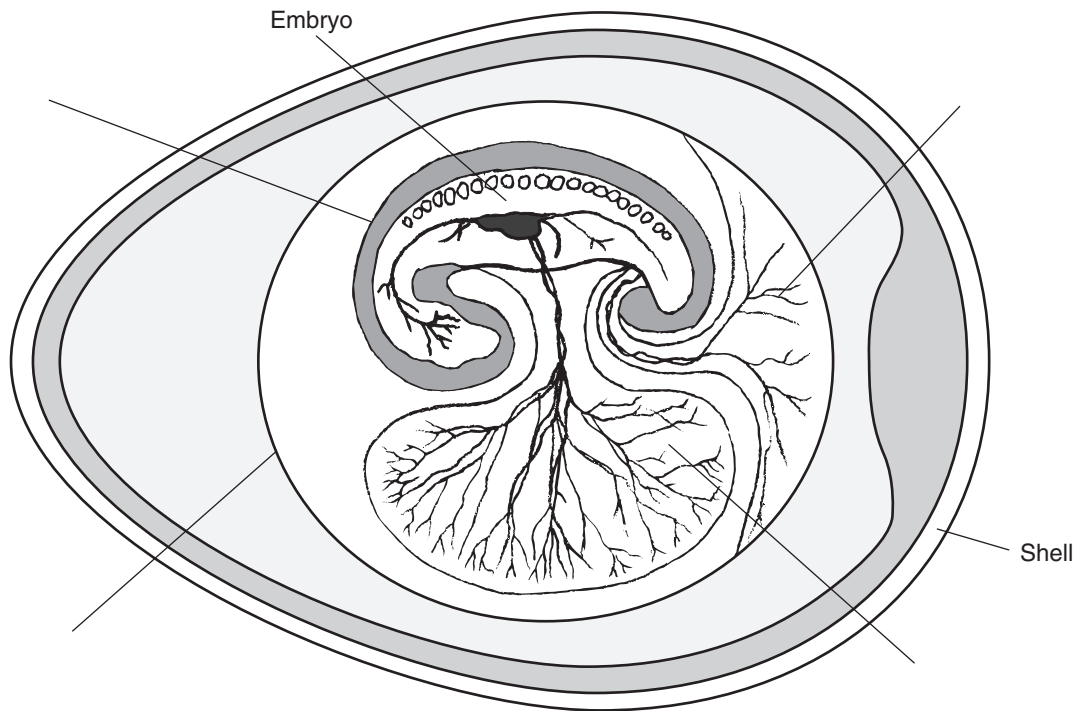
10. Circle the letter of each sentence that is true about response in reptiles.

- a. The reptilian cerebrum is smaller than that of amphibians.
- b. Reptiles that are active during the day tend to have complex eyes.
- c. Reptiles do not have ears.
- d. Snakes sense vibrations in the ground through bones in their skulls.

11. Explain why reptiles are able to carry more body weight than amphibians.

12. All reptiles reproduce by _____ fertilization in which the male deposits sperm inside the body of the female.

13. In the diagram below, label the four membranes in the amniotic egg that surround the developing embryo.



Groups of Reptiles (pages 803–805)

14. List the four living orders of reptiles.

- a. _____
- b. _____
- c. _____
- d. _____

15. Is the following sentence true or false? Both snakes and lizards have scaly skin and clawed toes. _____
16. Circle the letter of each characteristic of crocodilians.
- a. long snout
 - b. long legs
 - c. herbivore
 - d. protective of young
17. Members of the order Testudines that live on land are referred to as _____.
18. How do most turtles and tortoises protect themselves? _____
19. Circle the letter of each characteristic of turtles and tortoises.
- a. teeth
 - b. strong jaws
 - c. strong limbs
 - d. long, broad snout
20. Describe how tuataras differ from lizards. _____

Ecology of Reptiles (page 805)

21. Circle the letter of each sentence that is true about the ecology of reptiles.
- a. Reptiles are in no danger of disappearing.
 - b. Reptilian habitats have been expanding.
 - c. Humans hunt reptiles for food, to sell as pets, and for their skins.
 - d. Conservation programs are in place to help reptiles survive.

Reading Skill Practice

Flowcharts can help you to order the steps in a process or the stages in a series of events. Construct a flowchart that shows the stages in the evolution of reptiles, beginning at the end of the Carboniferous Period and ending with the extinction of dinosaurs at the end of the Cretaceous Period. See Appendix A for more information about flowcharts. Do your work on a separate sheet of paper.