

Chapter 1

The Study of Life

Reinforcement and Study Guide

Section 1.1 What Is Biology?

In your textbook, read about the science of biology.

Answer the following questions.

1. What is the primary focus of all biological studies?

2. What is meant by the statement, “Living things do not exist in isolation”?

In your textbook, read about why biologist study the diversity of life.

For each of the statements below, write true or false.

- _____ 3. People study biology only if they are planning to become biologists.
- _____ 4. By studying biology, you can better appreciate the great diversity of species on Earth and the way each species fits into the dynamic pattern of life on the planet.
- _____ 5. The study of biology includes the investigation of interactions among species.

In your textbook, read about the characteristics of living things.

Complete each statement.

6. To be considered _____, something must exhibit all of the _____ of life.
7. _____ is another word for “living thing.”
8. Every living thing, from simple, single-celled organisms to complex, multicellular plants and animals, is made up of parts that function together in an orderly living _____.

Read each of the following statements. If it describes the process of reproduction, write yes. If not, write no.

- _____ 9. New leaves appear on a tree in spring.
- _____ 10. An amoeba divides in half.
- _____ 11. A bean plant produces seeds in long pods.
- _____ 12. Pollen grains are released from a flower.
- _____ 13. A starfish produces a new arm after losing one to a predator.

Section 1.1 *What Is Biology?,
continued*

Circle the letter of the choice that best completes the statement.

14. A species is defined as a group of similar-looking organisms that
 a. undergo similar developmental changes. b. can interbreed.
 c. can interbreed and produce fertile offspring. d. reproduce in the same way.
15. Every organism begins life as a(n)
 a. embryo. b. single cell. c. nucleus. d. fertilized egg.
16. A corn plant producing ears of corn is an example of
 a. growth. b. reproduction. c. development. d. all of these.
17. If members of a species fail to reproduce successfully, the species
 a. will eventually become extinct. b. will not develop normally.
 c. will evolve into a new species. d. will remain unchanged.

Complete the table below by checking the correct column for each example.

Example	Stimulus	Response
18. The recess bell ringing at an elementary school		
19. Your mouth watering at the sight of food on a plate		
20. A sudden drop in air temperature		
21. A flu virus entering your body		
22. Getting butterflies in your stomach before giving a speech		

Answer the following questions.

23. Explain the concept of homeostasis.

24. What is an adaptation?

25. What is evolution?
