

Pretest: Living Systems

Read each question. Circle the letter of the correct answer.

1. What is the layer of air surrounding Earth called?
 - A. biosphere
 - B. geosphere
 - C. atmosphere
 - D. hydrosphere

2. Which discovery that pertains to all organisms was found with the use of microscopes?
 - A. multicellular
 - B. made of cells
 - C. different species
 - D. identical biochemically

3. Which of these is the basic unit of life?
 - A. atom
 - B. cell
 - C. DNA
 - D. species

4. What is the variety of life across the biosphere?
 - A. ecology
 - B. genomics
 - C. homeostasis
 - D. biodiversity

5. Which of these describes the levels of organization of an animal?
 - A. Tissues are composed of organs, which are composed of cells.
 - B. Organs are composed of cells, which are composed of tissues.
 - C. Organs are composed of tissues, which are composed of cells.
 - D. Tissues are composed of cells, which are composed of organs.

6. Which of these describes an individual living thing?
 - A. atoms
 - B. cell
 - C. species
 - D. organism

7. At all levels of life, what do related parts create when they interact to form a whole?
 - A. cell
 - B. system
 - C. species
 - D. biosphere

8. Which of these is the maintenance of constant internal conditions in an organism?
 - A. adaptation
 - B. homeostasis
 - C. negative feedback
 - D. structure specialization

9. What is a physical environment with different species that interact with one another and with nonliving things?
 - A. habitat
 - B. biosphere
 - C. ecosystem
 - D. adaptation

10. Which is the process by which all living things maintain a balance within their cells and with the environment?
 - A. growth
 - B. evolution
 - C. homeostasis
 - D. development

11. What is the substance that covers the majority of Earth's surface and also makes up the largest percentage of your cells?

- A.** water
- B.** carbon
- C.** hydrogen
- D.** nitrogen

12. What is a protein that detects a signal molecule and performs an action in response?

- A.** ligand
- B.** proton
- C.** vesicle
- D.** receptor

13. What is Lake Michigan a part of?

- A.** hydrosphere
- B.** atmosphere
- C.** geosphere
- D.** biosphere

14. Which of these comprises the parts of Earth that *biosphere* refers to?

- A.** living things
- B.** land masses
- C.** greater biodiversity
- D.** freshwater environments

15. Which of these describes the biosphere?

- A.** a group of living things that can interbreed to reproduce
- B.** all living things and the places on Earth where they are found
- C.** the variety of organisms on Earth or in a particular area of the biosphere
- D.** organisms interacting with each other and with nonliving things in a certain region