

# Life Science Diagnostic Test

## PART A Multiple Choice

Write the letter of the term or phrase that best completes the statement or answers the question.

- \_\_\_\_\_ 1. Every organism is made up of one or more  
a. viruses. b. cells. c. bacteria. d. biomes.
- \_\_\_\_\_ 2. Plants give off  
a. oxygen. b. carbon dioxide. c. hydrogen. d. helium.
- \_\_\_\_\_ 3. The place in which an organism lives is its  
a. habitat. b. population. c. species. d. niche.
- \_\_\_\_\_ 4. Most of the human skeletal system is made up of  
a. ligaments. b. cartilage. c. bones. d. joints.
- \_\_\_\_\_ 5. The heart is part of the  
a. digestive system. b. circulatory system. c. nervous system. d. skeletal system.
- \_\_\_\_\_ 6. Information collected in an experiment is called  
a. data. b. graph. c. conclusion. d. response.
- \_\_\_\_\_ 7. Plants are able to carry out photosynthesis using energy from  
a. their roots. b. the Sun. c. water. d. soil.
- \_\_\_\_\_ 8. What do organisms obtain in food for growth and energy?  
a. cells b. DNA c. oxygen d. nutrients
- \_\_\_\_\_ 9. A tool used to see very small things is a  
a. computer. b. X-ray. c. microscope. d. telescope.
- \_\_\_\_\_ 10. The human body system that protects the body from diseases is the  
a. immune system. b. digestive system. c. nervous system. d. circulatory system.
- \_\_\_\_\_ 11. Reptiles, fish, and amphibians are all  
a. warm-blooded vertebrates. b. cold-blooded vertebrates.  
c. warm-blooded invertebrates. d. cold-blooded invertebrates.
- \_\_\_\_\_ 12. Birds, reptiles, fish, and mammals belong to the kingdom  
a. Fungi b. Protista c. Animalia d. Plantae
- \_\_\_\_\_ 13. What do fish use to breathe?  
a. scales b. lungs c. blood d. gills
- \_\_\_\_\_ 14. The basic building blocks of all living things are  
a. tissues. b. cells. c. organ systems. d. muscles.
- \_\_\_\_\_ 15. The blood vessels that carry blood *back* to the heart are  
a. veins. b. capillaries. c. arteries. d. valves.
- \_\_\_\_\_ 16. Which of the following organisms can cause infections in humans?  
a. bacteria b. viruses c. fungi d. bacteria, viruses, and fungi

## Diagnostic Test *(continued)*

### PART A Multiple Choice *(continued)*

- \_\_\_\_\_ 17. Which of the following is an example of a multicellular organism?  
 a. a bacterium    b. a paramecium    c. an amoeba    d. a mushroom
- \_\_\_\_\_ 18. In order for an organism to survive, it needs food, water,  
 a. air, and sunlight.    b. air, and shelter.  
 c. sunlight, and shelter.    d. air, shelter, and sunlight.
- \_\_\_\_\_ 19. An earthworm is classified as an invertebrate because it  
 a. has a backbone.    b. is segmented.    c. has no backbone.    d. has a small brain.
- \_\_\_\_\_ 20. An instrument used to measure temperature is a  
 a. a barometer.    b. an anemometer.    c. a thermometer.    d. a meter stick.

### PART B Fill In

Complete each sentence with a term from the box.

brain	graphs	classify	fossils	inherit
invertebrates	kingdoms	life cycle	respiratory	soil

- To arrange plants into categories based on their similarities and differences is to \_\_\_\_\_ them.
- Sponges, worms, and arthropods are all \_\_\_\_\_.
- Scientists study \_\_\_\_\_ to learn about how organisms have changed over time.
- Organisms \_\_\_\_\_ some of their characteristics from their parents.
- The organ system that helps people breathe is the \_\_\_\_\_ system.
- Every organism belongs to one of the six \_\_\_\_\_.
- The \_\_\_\_\_ is the control center of the body.
- Infancy and adolescence are two stages in the human \_\_\_\_\_.
- Most plants need sunlight, water, and \_\_\_\_\_ to grow.
- Scientists often display data from their experiments using \_\_\_\_\_.

### PART C True/False

Write *true* if the statement is true. If the statement is false, change the underlined term to make the statement true.

- \_\_\_\_\_ 1. The scientific method often starts with a question.
- \_\_\_\_\_ 2. Organisms are not able to reproduce themselves.
- \_\_\_\_\_ 3. Cells are the basic building blocks of all living things.
- \_\_\_\_\_ 4. Plants and animal cells are the same.
- \_\_\_\_\_ 5. The genetic material found in living things is called GNA.

## Diagnostic Test *(continued)*

### PART D Matching

Match each term in **Column B** with its description in **Column A**. Write the letter of the correct term in the space provided.

#### Column A

- \_\_\_\_\_ 1. the study of how living things interact with their environments
- \_\_\_\_\_ 2. way in which plants make their own food
- \_\_\_\_\_ 3. group of organisms that share the same characteristics
- \_\_\_\_\_ 4. shows which organisms other organisms eat
- \_\_\_\_\_ 5. eyes, ears, nose, tongue, and skin
- \_\_\_\_\_ 6. helps a living organism survive in its environment
- \_\_\_\_\_ 7. species in danger of becoming extinct
- \_\_\_\_\_ 8. animal that does not have a backbone
- \_\_\_\_\_ 9. the breakdown of food into forms the body can use
- \_\_\_\_\_ 10. the only animals that make milk to feed their young

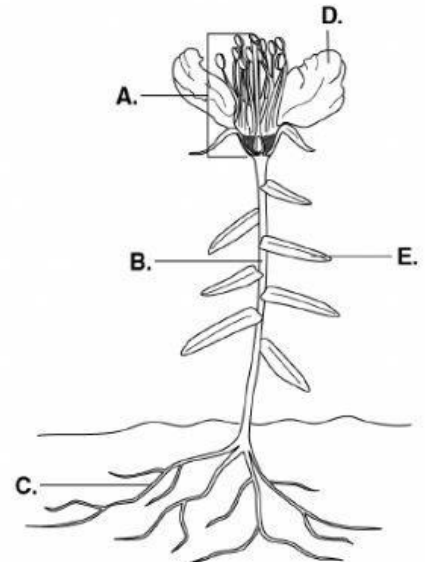
#### Column B

- a. invertebrate
- b. adaptation
- c. ecology
- d. mammals
- e. digestion
- f. sense organs
- g. food chain
- h. species
- i. photosynthesis
- j. endangered

### PART E Interpreting Diagrams

Use the labeled parts of the diagram to answer the following questions

1. Which part of the plant makes pollen and seeds? \_\_\_\_\_
2. The seed-making parts are protected by which part?  
\_\_\_\_\_
3. Which part of the plant is used for support? \_\_\_\_\_
4. Which part of the plant takes in water and minerals?  
\_\_\_\_\_
5. In which part of the plant does photosynthesis primarily take place? \_\_\_\_\_
6. Is this plant more like a cherry tree or a pine tree? Explain.  
\_\_\_\_\_  
\_\_\_\_\_



**Diagnostic Test** *(continued)***PART F Written Response**

Answer the following questions in complete sentences.

1. **COMPARE:** What are some similarities and differences between plants and animals? Give examples of each in your explanation. \_\_\_\_\_

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2. **HYPOTHESIZE:** Some human activities change environments in ways that harm both people and other organisms. Describe one example of this kind of activity. \_\_\_\_\_

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3. **ANALYZE:** In the table below, match each animal to the habitat in which it lives by drawing a line from each animal to the correct habitat. Then, in the spaces provided, describe two ways in which each animal is well suited to live in its habitat.

Animal	Habitat
Fish	Ice cap
Hawk	Lake
Polar bear	Tree tops, air

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4. **EXPLAIN:** A system is a group of parts that work together. Explain how the human body is a system. \_\_\_\_\_

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Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

## Diagnostic Test *(continued)*

### PART F Written Response *(continued)*

5. **DESCRIBE:** How do scientists find answers to questions? Be sure to include some methods and tools they use. \_\_\_\_\_

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