

Bones, Muscles, and Skin ■ *Guided Reading and Study*

Body Organization and Homeostasis

This section tells how the body is organized and describes the four types of tissue in the human body.

Introduction

1. List the levels of organization in the human body, starting with the smallest unit.
 - a. _____
 - b. _____
 - c. _____
 - d. _____

Cells

2. The basic unit of structure and function in a living thing is a(n) _____.
3. Circle the letter of the outside boundary of an animal cell.
 - a. cytoplasm
 - b. nucleus
 - c. tissue
 - d. cell membrane
4. The control center that directs the cell's activities and contains information that determines the cell's form and function is the _____.
5. What is the cytoplasm?

6. Is the following sentence true or false? Cells carry on the processes that keep organisms alive. _____

Tissues

7. What is a tissue?

8. Complete the table to show the functions and examples of the tissues in the human body.

Tissues in the Human Body		
Tissue	Function	Example
Muscle		
Nervous		
Connective		
Epithelial		

Organs and Organ Systems

9. A structure that is made up of different kinds of tissues is a(n) _____.
10. Circle the letter of the unit of organization that represents an organ.
- a. muscle cell
 - b. blood
 - c. heart
 - d. digestive system
11. Is the following sentence true or false? An organ has a specific job that is more complex than that of a tissue. _____
12. What is an organ system?
- _____
- _____
- _____

Match the organ system with its function.

Organ Systems	Functions
___ 13. endocrine	a. Takes oxygen into the body
___ 14. circulatory	b. Supports and protects the body
___ 15. excretory	c. Removes wastes
___ 16. respiratory	d. Controls body process by means of chemicals
___ 17. digestive	e. Takes food into the body and breaks it down
___ 18. skeletal	f. Transports materials to and from body cells

Homeostasis

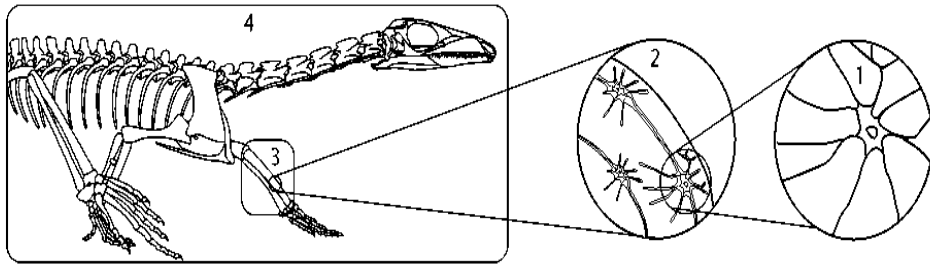
19. The process by which an organism's internal environment is kept stable in spite of changes in the external environment is called _____.
20. How does your body maintain a constant temperature on a hot day?
- _____
- _____
- _____

Bones, Muscles, and Skin ■ *Review and Reinforce*

Body Organization and Homeostasis

Understanding Main Ideas

The illustration below shows the units of organization in a reptile. The units are numbered 1-4. Label the numbered units of organization in the spaces provided.



- 1. _____
- 2. _____
- 3. _____
- 4. _____

Building Vocabulary

Fill in the blank to complete each statement.

- 5. The _____ is the structure in a cell that contains information that determines the cell's characteristics.
- 6. _____ tissue makes up organs that are able to contract, or shorten. _____ tissue makes up the organs that send messages to control the body.

- 7. The inside of the digestive system is lined with _____ tissue.
- 8. The kidney is a(n) _____. The excretory system is a(n) _____.
- 9. A(n) _____ is the basic unit of structure and function in a living thing.
- 10. _____ tissue provides support for your body and connects all its parts.
- 11. The _____ is the area between the cell membrane and the nucleus; it contains a clear, jellylike substance.