

Chapter 35 Nervous System

Section 35–1 Human Body Systems (pages 891–896)



TEKS FOCUS: 5C Levels of organization; 10A Functions of systems; 10B Interrelationships of organ systems; 11A Internal feedback mechanisms and homeostasis

This section describes human organ systems and explains how the body maintains homeostasis.

Organization of the Body (pages 891–894)

1. List the levels of organization in a multicellular organism, from smallest to largest.
 - a. _____
 - b. _____
 - c. _____
 - d. _____

Match the organ system with its function.

Organ System	Function
_____ 2. Nervous system	a. Stores mineral reserves and provides a site for blood cell formation
_____ 3. Skeletal system	b. Provides oxygen and removes carbon dioxide
_____ 4. Integumentary system	c. Coordinates the body’s response to changes in its internal and external environments
_____ 5. Endocrine system	d. Helps produce voluntary movement, circulate blood, and move food
_____ 6. Lymphatic/Immune systems	e. Controls growth, development, metabolism, and reproduction
_____ 7. Muscular system	f. Eliminates wastes and maintains homeostasis
_____ 8. Reproductive system	g. Serves as a barrier against infection and injury
_____ 9. Respiratory system	h. Converts food so it can be used by cells
_____ 10. Excretory system	i. Helps protect the body from disease
_____ 11. Circulatory system	j. Produces reproductive cells
_____ 12. Digestive system	k. Brings materials to cells, fights infection, and helps to regulate body temperature

13. What are four types of tissues found in the human body? _____

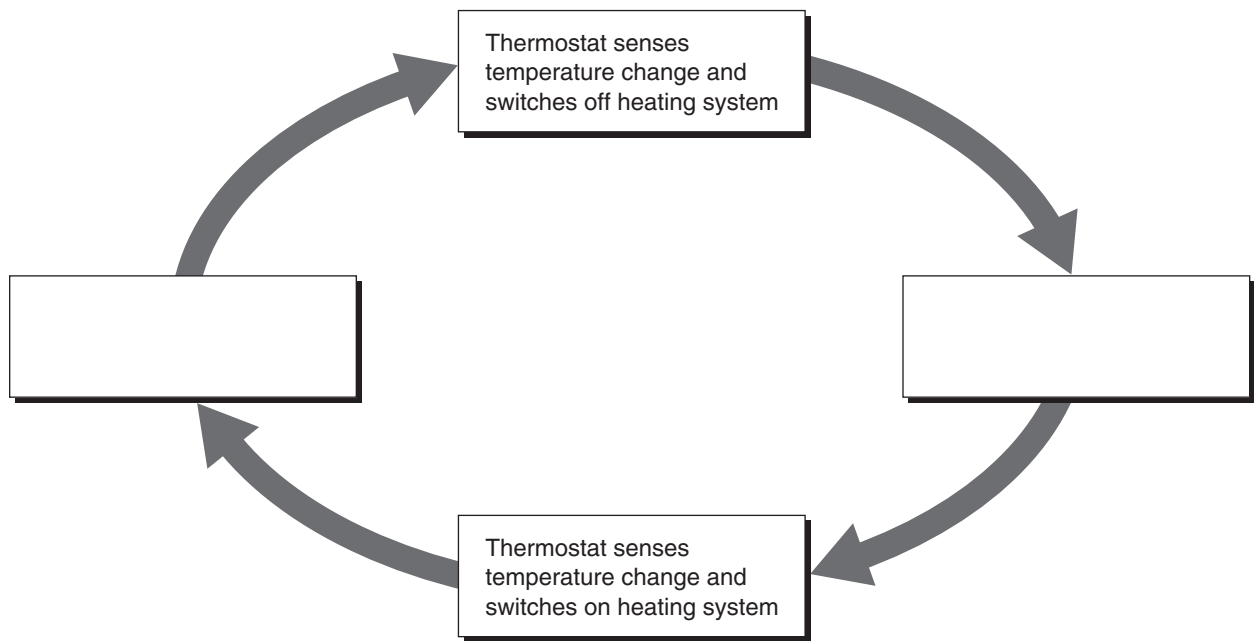
14. The eye is an example of a (an) _____.

15. Circle the letter of the type of tissue that covers interior and exterior body surfaces.
- | | |
|---------------|---------------|
| a. nervous | c. epithelial |
| b. connective | d. muscle |

16. What is a gland? _____
17. Circle the letter of the type of tissue that connects body parts.
- a. nervous
 - b. connective
 - c. epithelial
 - d. integumentary

Maintaining Homeostasis (pages 895–896)

18. The process of maintaining a controlled, stable internal environment is called _____.
19. The process in which a stimulus produces a response that opposes the original stimulus is referred to as _____.
20. Fill in the missing labels in the diagram to show how a thermostat uses feedback inhibition to maintain a stable temperature in a house.



21. Is the following sentence true or false? The part of the brain that monitors and controls body temperature is the hypothalamus. _____
22. What happens if nerve cells sense that the core body temperature has dropped below 37°C? _____
23. What happens if the body temperature rises too far above 37°C? _____