

Unit Review

Summary

- The skeletal system is made up of bones, cartilage, tendons, and ligaments. The skeletal system provides a framework for the body. It supports and protects the body.
- The muscular system works with the skeletal system to enable the body to move. Muscles are specialized tissue that contract to cause movement.
- The circulatory system consists of the heart and blood vessels. The circulatory system transports nutrients and oxygen to all cells of the body. It also carries wastes to the excretory and respiratory systems.
- The main organ of the respiratory system is the lungs. The respiratory system takes oxygen into and removes carbon dioxide from the body.
- The digestive system consists of the mouth, pharynx, esophagus, stomach, small intestine, and large intestine. The digestive system changes food into a form that the body can use.
- The main organ of the excretory system is the kidneys. Wastes are released from the body by the actions of the excretory system.
- All actions of the body are controlled by the nervous system. The brain is the command center of the nervous system. Messages are transmitted between the body and brain by a network of nerves.
- The reproductive system enables a person to produce offspring. This is the only organ system whose structure differs in males and females. However, both male and female reproductive systems produce, store, and release specialized sex cells called gametes.
- The immune system protects the body from disease. The system has both nonspecific and specific defenses to fight disease. The nonspecific defenses include the skin, mucus, digestive juices, and body secretions. Specific defenses include antibodies and T-cells.



For Your Portfolio

1. Pretend you were able to become very small and travel inside a human body. Think about the trip you would take through one of the following body systems: respiratory, digestive, circulatory, or nervous. Write an essay that describes your trip. Be sure to visit all the parts of the system. Include how you enter and exit the system.
2. Draw a series of pictures to show what happens to a slice of pizza as it enters your mouth and moves through your digestive system.
3. With a group of classmates, create a skit that explains what occurs in the nervous system of a person who accidentally places his hand on a hot stove. You will need the following characters: neurons, impulses, and the brain. Be sure the skit shows how messages are transmitted throughout the person's body.
4. Suppose you had to teach a group of your classmates about the skeletal and muscular systems. Work in groups of four to write a plan that describes how you would teach the lesson. Include a demonstration to show how a joint moves or how muscles work in pairs. You may want to create a series of diagrams to help with the instruction.
5. Make an outline or flowchart of the reproductive system. Include information on the parts of the system in both males and females, the menstrual cycle, and the steps involved in fertilization.

Unit 9

PRACTICE TEST

Match each body system in Column I with its function in Column II.

Column I	Column II
___ 1. circulatory	a. protects against disease
___ 2. respiratory	b. transmits messages in the body
___ 3. digestive	c. gives the body shape and support
___ 4. reproductive	d. brings oxygen into the body
___ 5. immune	e. produces offspring
___ 6. nervous	f. moves blood through the body
___ 7. skeletal	g. helps bones move the body
___ 8. muscular	h. changes food into a usable form

Answer each question in the space provided.

9. How do the skeletal and muscular systems work together to move the body?

10. How do the respiratory and circulatory systems work together to remove waste products from body cells? _____

11. What role does the stomach play in the digestive and immune systems?

12. How are the testes and the ovaries alike? _____

Answer one of the following questions.

13. Make a series of sketches that show how the fertilization and development of an egg occurs. Or, write an essay that explains this process.

14. Make sketches that show what happens when a pathogen enters the body. Show both a nonspecific and specific defense at work. Or, write an essay that explains what happens.