

Organ Systems of the Body

A smooth-running automobile is the result of many systems harmoniously working together. The engine, the fuel system, the exhaust system, the brake system, and the cooling system are but a few of the many complex structural units that the automobile as a whole relies on to keep it functioning smoothly. So it is with the human body. We, too, depend on the successful performance of many individual systems working together to create and maintain a healthy human being.

When you have completed your review of the 11 major organ systems and the organs that make up these systems, you will find your understanding of the performance of the body as a whole much more meaningful.

TOPICS FOR REVIEW

Before progressing to Chapter 4, you should have an understanding of the 11 major organ systems and be able to identify the organs that are included in each system.

ORGAN SYSTEMS OF THE BODY

Match the term on the left with the proper selection on the right.

Group A

- _____ 1. Integumentary
- _____ 2. Skeletal
- _____ 3. Muscular
- _____ 4. Nervous
- _____ 5. Endocrine

- A. Hair
- B. Spinal cord
- C. Hormones
- D. Tendons
- E. Joints

Group B

- _____ 6. Circulatory
- _____ 7. Lymphatic
- _____ 8. Urinary
- _____ 9. Digestive
- _____ 10. Respiratory
- _____ 11. Reproductive

- A. Esophagus
- B. Ureters
- C. Larynx
- D. Genitalia
- E. Spleen
- F. Capillaries

Circle the one that does not belong.

- | | | | |
|---------------|-----------|-------------|------------|
| 12. Pharynx | Trachea | Mouth | Alveoli |
| 13. Uterus | Rectum | Gonads | Prostate |
| 14. Veins | Arteries | Heart | Pancreas |
| 15. Pineal | Bladder | Ureters | Urethra |
| 16. Tendon | Smooth | Joints | Voluntary |
| 17. Pituitary | Brain | Spinal cord | Nerves |
| 18. Cartilage | Joints | Ligaments | Tendons |
| 19. Hormones | Pituitary | Pancreas | Appendix |
| 20. Thymus | Nails | Hair | Oil glands |
| 21. Esophagus | Pharynx | Mouth | Trachea |
| 22. Thymus | Spleen | Tonsils | Liver |

Fill in the missing areas of the chart.

SYSTEM

ORGANS

FUNCTIONS

23. Integumentary

23. Skin, nails, hair,
sense receptors,
sweat glands, oil glands

23. _____

24. Skeletal

24. _____

24. Support, movement,
storage of minerals, blood
formation

25. Muscular

25. Muscles

25. _____

26. _____

26. Brain, spinal cord,
nerves

26. Communication,
integration, control, recognition of
sensory stimuli

27. Endocrine

27. _____

27. Secretion of
hormones;
communication,
integration, control

28. Circulatory

28. Heart, blood vessels

28. _____

29. Lymphatic

29. _____

29. Transportation,
immunity

30. _____

30. Kidneys, ureters,
electrolyte bladder,
urethra

30. Elimination of wastes,
balance, acid-base
balance,
water balance

31. Digestive

31. _____

31. Digestion of food,
absorption of nutrients

32. _____

32. Nose, pharynx, larynx,
trachea, bronchi, lungs

32. Exchange of gases in
the lungs; regulation of
acid-base balance

33. Reproductive

33. _____

33. Survival of species;
production of sex cells,
fertilization, development,
birth; nourishment of
offspring; production of
hormones



If you have had difficulty with this section, review pages 58-70.

41. WORD FIND

Can you find the 11 organ systems? Words may be spelled top to bottom, bottom to top, right to left, left to right, or diagonally.

Y R A T N E M U G E T N I R F
H N E R V O U S K I R J M G T
L Y M P H A T I C I S Y Y U I
B N X Y R O T A L U C R I C W
P E L R E O M J M S O M M P S
C C W M A N D L A T E L E K S
R R K E M L I U A A V V U K N
D K X P D J U R C J I R Q E M
C D B V C V I C C T T K W C X
X R Q Q D P H C S O I X P A Z
M F M U S Y D E V U D V Y K E
U E S E C Z G T Q D M N E K O
P Y R A N I R U C T C N E W H
N H T N D E P S I X A Q O I E

| | | |
|---------------|--------------|-------------|
| Circulatory | Lymphatic | Respiratory |
| Digestive | Muscular | Skeletal |
| Endocrine | Nervous | Urinary |
| Integumentary | Reproductive | |

DID YOU KNOW?

Muscles make up 40% of your body weight. Your skeleton, however, accounts for only 18% of your body weight.

CHECK YOUR KNOWLEDGE

Multiple Choice

Circle the correct answer.

1. Which body system removes waste products from the blood?
 - A. Digestive
 - B. Endocrine
 - C. Circulatory
 - D. Urinary

2. Ovaries and testes are considered components of which system?
 - A. Reproductive system
 - B. Endocrine system
 - C. Both A and B
 - D. None of the above
3. Which of the following organs is classified as an accessory organ of the digestive system?
 - A. Mouth
 - B. Esophagus
 - C. Tongue
 - D. Anal canal
4. Factors in the environment (such as heat, light, pressure, and temperature) that can be recognized by the nervous system are called:
 - A. Effectors
 - B. Stimuli
 - C. Receptors
 - D. Nerve impulses
5. Which body system stores the mineral calcium?
 - A. Circulatory
 - B. Digestive
 - C. Lymphatic
 - D. Skeletal
6. What is undigested material in the gastrointestinal tract called?
 - A. Feces
 - B. Urine
 - C. Lymph
 - D. Blood
7. Which body system produces heat and maintains body posture?
 - A. Endocrine
 - B. Muscular
 - C. Circulatory
 - D. Skeletal
8. Which of the following is *not* a function of the integumentary system?
 - A. Integration
 - B. Temperature regulation
 - C. Ability to serve as a sense organ
 - D. Protection
9. Which of the following is *not* a component of the digestive system?
 - A. Spleen
 - B. Liver
 - C. Pancreas
 - D. Gallbladder

10. When a group of tissues starts working together to perform a common function, what level of organization is achieved?
- A. Systemic
 - B. Tissue
 - C. Organ
 - D. Cellular

Matching

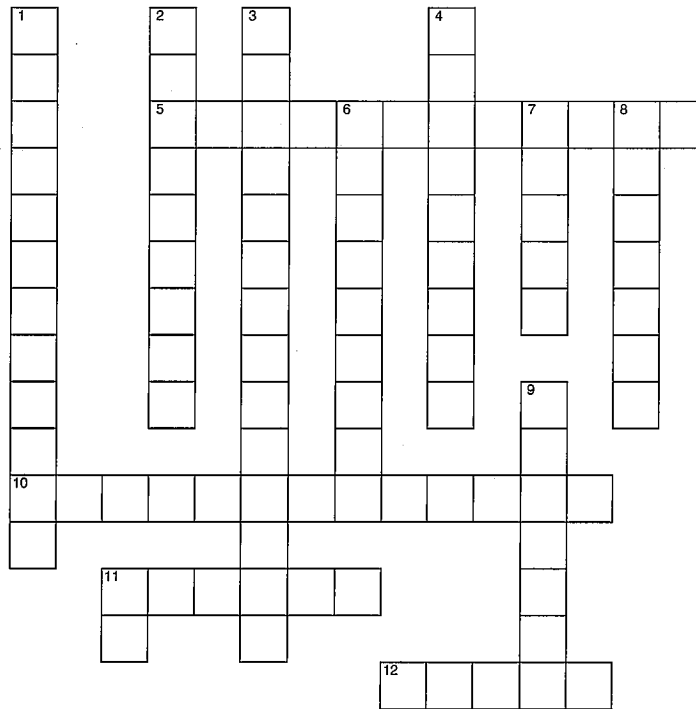
Select the most appropriate answer from column B for each item in column A. There is only one correct answer for each item.

- Column A
- _____ 11. Sweat glands
 - _____ 12. Heart
 - _____ 13. Spleen
 - _____ 14. Vas deferens
 - _____ 15. Bladder
 - _____ 16. Gallbladder
 - _____ 17. Uterine tubes
 - _____ 18. Trachea
 - _____ 19. Spinal cord
 - _____ 20. Adrenals

- Column B
- A. Endocrine
 - B. Urinary
 - C. Integumentary
 - D. Circulatory
 - E. Respiratory
 - F. Digestive
 - G. Male reproductive
 - H. Lymphatic
 - I. Female reproductive
 - J. Nervous

ORGAN SYSTEMS

Fill in the crossword puzzle.



Across

- 5. Specialized signal of nervous system (two words)
- 10. Skin
- 11. Testes and ovaries
- 12. Undigested residue of digestion

Down

- 1. Inflammation of the appendix
- 2. Vulva, penis, and scrotum
- 3. Heart and blood vessels
- 4. Subdivision of circulatory system
- 6. System of hormones
- 7. Waste product of kidneys
- 8. Agent that causes change in the activity of a structure
- 9. Chemical secretion of endocrine system
- 11. Gastrointestinal tract (abbreviation)