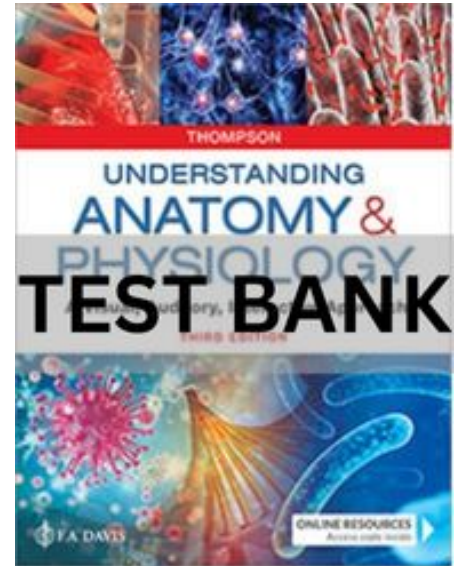


Chapter 1: Orientation to the Human Body

Matching



Match the name of each organ system to its key components.

- a. integumentary system
- b. skeletal system
- c. muscular system
- d. lymphatic system
- e. respiratory system
- f. urinary system
- g. nervous system
- h. endocrine system
- i. circulatory system
- j. digestive system
- k. male reproductive system
- l. female reproductive system

- ___ 1. Consists of stomach, small and large intestines, liver, and pancreas
- ___ 2. Consists of skin, hair, and nails
- ___ 3. Consists of kidneys, ureters, urinary bladder, and urethra
- ___ 4. Consists primarily of skeletal muscles
- ___ 5. Consists of heart, arteries, veins, and capillaries
- ___ 6. Consists of brain, spinal cord, nerves, and sense organs
- ___ 7. Consists of ovaries, fallopian tubes, uterus, vagina, and breasts
- ___ 8. Consists of pituitary gland, adrenals, pancreas, and thyroid
- ___ 9. Consists of lymph nodes, lymphatic vessels, lymph, thymus, and spleen
- ___ 10. Consists of the nose, pharynx, larynx, trachea, bronchi, and lungs

Match each term to its definition.

- a. distal
- b. proximal
- c. medial
- d. lateral
- e. superior
- f. inferior
- g. anterior

Understanding Anatomy & Physiology: A Visual, Auditory, Interactive Approach 3rd Edition

Test Bank

- h. posterior
- i. superficial
- j. deep

- ___ 11. Toward the back of the body
- ___ 12. Farthest from the point of origin
- ___ 13. Above
- ___ 14. At or near the body's surface
- ___ 15. Toward the body's midline
- ___ 16. Closest to the point of origin
- ___ 17. Toward the front of the body
- ___ 18. Below

Match each term to its location on the body.

- a. frontal
- b. deltoid
- c. brachial
- d. inguinal
- e. pectoral
- f. sternal
- g. digital
- h. antecubital
- i. buccal
- j. cephalic
- k. lumbar
- l. calcaneal
- m. plantar
- n. pedal
- o. tarsal
- p. axillary

- ___ 19. Arm
- ___ 20. Lower back
- ___ 21. Armpit
- ___ 22. Heel
- ___ 23. Fingers
- ___ 24. Shoulder
- ___ 25. Sole of the foot
- ___ 26. Forehead
- ___ 27. Chest
- ___ 28. Front of elbow
- ___ 29. Foot
- ___ 30. Cheek

Test Bank

___ 31. Groin

___ 32. Ankle

Multiple Choice

Identify the choice that best completes the statement or answers the question.

___ 33. Which organ system produces immune cells and has a role in fluid balance?

- a. Integumentary system
- b. Circulatory system
- c. Endocrine system
- d. Lymphatic system

___ 34. Which organ system protects organs, allows for support and movement, and also plays a key role in blood formation?

- a. Circulatory system
- b. Muscular system
- c. Skeletal system
- d. Nervous system

___ 35. Which type of tissue covers the body's surface?

- a. Epithelial
- b. Connective
- c. Muscle
- d. Nerve

___ 36. Bone, cartilage, and adipose tissue are all types of

- a. epithelial tissue.
- b. connective tissue.
- c. muscle.
- d. nerve tissue.

___ 37. The type of plane that divides the body horizontally into upper and lower portions is called a

- a. sagittal plane.
- b. frontal plane.
- c. transverse plane.
- d. coronal plane.

___ 38. Most illustrations that show the contents of the abdominal cavity use what type of plane?

- a. Sagittal
- b. Transverse
- c. Horizontal
- d. Frontal

___ 39. Which of the following correctly describes the anatomical position?

- a. Standing erect, facing forward, with arms outstretched
- b. Standing erect with arms at sides, palms facing backward, face and feet facing forward
- c. Standing erect with arms overhead, face and feet facing forward
- d. Standing erect with arms at sides and with palms, face, and feet facing forward

___ 40. The dorsal cavity contains the

- a. thoracic and abdominopelvic cavities.
- b. cranial and spinal cavities.
- c. mediastinum and pleural cavities.
- d. abdominal and pelvic cavities.

Test Bank

- _____ 41. The heart is located in the mediastinum, which is part of what cavity?
- Thoracic cavity
 - Dorsal cavity
 - Spinal cavity
 - Cranial cavity
- _____ 42. A patient comes to the hospital for treatment of pain in the right hypochondriac region. Based on the organs located in that region, which organ might be causing the pain?
- Stomach
 - Small intestines
 - Gallbladder
 - Appendix

Completion

Complete each statement.

43. The structure of the body is called _____; how it functions is called _____.
44. The human body is organized from the very _____ to the very _____.
45. The region proximal to the patellar region and distal to the inguinal region is the _____ region.
46. The region superior to the pubic region and inferior to the abdominal region is the _____ region.
47. The two major body cavities are the _____ and _____ cavities.
48. The constancy of the body's internal environment is called _____.
49. _____ feedback is when an effector opposes the stimulus and reverses the direction of change.
50. During childbirth, the hormone oxytocin is released, which causes even greater contractions and an even greater release of oxytocin. This is an example of _____ feedback.

Chapter 1: Orientation to the Human Body

Answer Section

MATCHING

1. ANS: J PTS: 1 DIF: E REF: 6
KEY: REMEMBERING
2. ANS: A PTS: 1 DIF: E REF: 5
KEY: REMEMBERING
3. ANS: F PTS: 1 DIF: E REF: 5
KEY: REMEMBERING
4. ANS: C PTS: 1 DIF: E REF: 5
KEY: REMEMBERING
5. ANS: I PTS: 1 DIF: E REF: 6
KEY: REMEMBERING
6. ANS: G PTS: 1 DIF: E REF: 6
KEY: REMEMBERING
7. ANS: L PTS: 1 DIF: E REF: 6
KEY: REMEMBERING
8. ANS: H PTS: 1 DIF: E REF: 6
KEY: REMEMBERING
9. ANS: D PTS: 1 DIF: E REF: 5
KEY: REMEMBERING
10. ANS: E PTS: 1 DIF: E REF: 5
KEY: REMEMBERING

11. ANS: H PTS: 1 DIF: E REF: 7
KEY: REMEMBERING
12. ANS: A PTS: 1 DIF: E REF: 7
KEY: REMEMBERING
13. ANS: E PTS: 1 DIF: E REF: 7
KEY: REMEMBERING
14. ANS: I PTS: 1 DIF: E REF: 7
KEY: REMEMBERING
15. ANS: C PTS: 1 DIF: E REF: 7
KEY: REMEMBERING
16. ANS: B PTS: 1 DIF: E REF: 7
KEY: REMEMBERING
17. ANS: G PTS: 1 DIF: E REF: 7
KEY: REMEMBERING
18. ANS: F PTS: 1 DIF: E REF: 7
KEY: REMEMBERING

19. ANS: C PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
20. ANS: K PTS: 1 DIF: M REF: 9
KEY: REMEMBERING

21. ANS: P PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
22. ANS: L PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
23. ANS: G PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
24. ANS: B PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
25. ANS: M PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
26. ANS: A PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
27. ANS: E PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
28. ANS: H PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
29. ANS: N PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
30. ANS: I PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
31. ANS: D PTS: 1 DIF: M REF: 9
KEY: REMEMBERING
32. ANS: O PTS: 1 DIF: M REF: 9
KEY: REMEMBERING

MULTIPLE CHOICE

33. ANS: D
The lymphatic system produces immune cells and has a role in fluid balance. The integumentary system has a role in protection, temperature regulation, water retention, and sensation. The circulatory system distributes oxygen, nutrients, water, hormones, and other electrolytes; it also has a role in fluid and electrolyte balance. The endocrine system produces hormones and regulates other systems.
- PTS: 1 DIF: E REF: 5 KEY: REMEMBERING
34. ANS: C
The skeletal system protects organs, gives the body support and allows it to move, and also plays a role in the formation of blood cells. The circulatory system distributes oxygen, nutrients, water, hormones, and other electrolytes; it also has a role in fluid and electrolyte balance. The muscular system allows the body to move and produces heat. The nervous system regulates and coordinates other systems, and also has a role in sensation and memory.
- PTS: 1 DIF: E REF: 5 KEY: REMEMBERING
35. ANS: A
Epithelial tissue covers the body surfaces. Connective tissue connects and supports parts of the body. Muscle contracts to produce movement. Nerve tissue generates and transmits impulses to regulate body function.
- PTS: 1 DIF: E REF: 4 KEY: REMEMBERING
36. ANS: B
Bone, cartilage, and adipose tissue are all types of connective tissue.

- PTS: 1 DIF: M REF: 4 KEY: UNDERSTANDING
37. ANS: C
A transverse plane divides the body horizontally into upper and lower portions. A sagittal plane divides the body lengthwise into right and left sides. A frontal plane divides the body lengthwise into anterior and posterior positions. A coronal plane is another name for a frontal plane.
- PTS: 1 DIF: E REF: 8 KEY: REMEMBERING
38. ANS: D
Most illustrations that show the contents of the abdominal cavity use a frontal plane. A sagittal plane is used to illustrate the organs of the head or pelvic cavity. A horizontal plane is another name for a transverse plane. A transverse plane is used by computed tomography scanners.
- PTS: 1 DIF: M REF: 8 KEY: APPLYING
39. ANS: D
The anatomical position involves standing erect with arms at the sides and with face, palms, and feet facing forward.
- PTS: 1 DIF: E REF: 7 KEY: REMEMBERING
40. ANS: B
The dorsal cavity contains the cranial and spinal cavities. The other cavities are all contained in the ventral cavity.
- PTS: 1 DIF: M REF: 10 KEY: REMEMBERING
41. ANS: A
The mediastinum is part of the thoracic cavity. The dorsal cavity is located at the back of the body. The spinal and cranial cavities are part of the dorsal cavity.
- PTS: 1 DIF: E REF: 10 KEY: REMEMBERING
42. ANS: C
The gallbladder is located in the right hypochondriac region. The stomach is found in the epigastric region. The small intestines are in the right and left lumbar regions, right and left iliac regions, and hypogastric region. The appendix is in the right iliac region.
- PTS: 1 DIF: D REF: 11 KEY: ANALYZING

COMPLETION

43. ANS: anatomy, physiology
- PTS: 1 DIF: E REF: 3 KEY: REMEMBERING
44. ANS: simple, complex
- PTS: 1 DIF: E REF: 4 KEY: REMEMBERING
45. ANS: femoral
- PTS: 1 DIF: D REF: 9 KEY: APPLYING
46. ANS: pelvic

- PTS: 1 DIF: D REF: 9 KEY: APPLYING
 47. ANS: dorsal, ventral
 ventral, dorsal
- PTS: 1 DIF: E REF: 10 KEY: REMEMBERING
 48. ANS: homeostasis
- PTS: 1 DIF: E REF: 12 KEY: REMEMBERING
 49. ANS: Negative
- PTS: 1 DIF: M REF: 13 KEY: REMEMBERING
 50. ANS: positive
- PTS: 1 DIF: M REF: 13 KEY: APPLYING

Chapter 2: Chemistry of Life

Matching

Match each term to its definition or characteristic.

- a. galactose
- b. electron
- c. radioactivity
- d. proton
- e. amino group
- f. glucose
- g. compounds
- h. carboxyl group
- i. cation
- j. glycogen
- k. catalyst
- l. polar
- m. buffer
- n. anion
- o. enzymes
- p. matter
- q. neutron
- r. atomic weight
- s. fructose

- ___ 1. Positively charged atomic particle
- ___ 2. Stored form of sugar in the human body
- ___ 3. Having oppositely charged ends
- ___ 4. COOH molecule
- ___ 5. Atom with a positive charge
- ___ 6. Substances that donate or remove H⁺ ions

- ___ 7. Atom with a negative charge
- ___ 8. Primary source of energy used by most of the body's cells
- ___ 9. Substance that enhances the rate of a chemical reaction
- ___ 10. NH₃ molecule

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ___ 11. What differentiates one element from another?
 - a. The number of shells encircling the nucleus
 - b. The number of electrons
 - c. The number of neutrons
 - d. The number of protons
- ___ 12. What distinguishes elements from compounds?
 - a. Elements can be broken down into two or more compounds.
 - b. Elements have only one kind of atom.
 - c. Elements do not combine with compounds.
 - d. Elements do not react with other elements.
- ___ 13. Which four elements make up more than 96% of the human body?
 - a. Oxygen, carbon, hydrogen, and iron
 - b. Carbon, hydrogen, calcium, and oxygen
 - c. Nitrogen, oxygen, carbon, and sodium
 - d. Oxygen, carbon, hydrogen, and nitrogen
- ___ 14. Electrons are found
 - a. orbiting around the nucleus in circular paths.
 - b. moving around the nucleus in concentric clouds.
 - c. in individual clouds (one electron per cloud) that orbit the nucleus.
 - d. in fixed positions on the rings that surround the nucleus.
- ___ 15. Where are protons and neutrons located?
 - a. Protons and neutrons orbit the nucleus in one or more concentric clouds.
 - b. Protons orbit the nucleus in a cloud, and neutrons reside in the nucleus.
 - c. Protons and neutrons both reside in the nucleus.
 - d. Neutrons orbit the nucleus in a cloud, whereas protons reside in the nucleus.
- ___ 16. What are the electrons in the outer energy level (shell) called?
 - a. Covalent electrons
 - b. Bonding electrons
 - c. Valence electrons
 - d. Ionic electrons
- ___ 17. An atom is stable when the outer shell contains how many electrons?
 - a. Four
 - b. Six
 - c. Eight
 - d. Twelve

- ___ 18. Why do atoms lose, gain, or share electrons?
- To release energy
 - To obtain stability
 - To increase bonding
 - To form compounds
- ___ 19. Which element makes up the greatest percentage of the body's weight?
- Carbon
 - Hydrogen
 - Nitrogen
 - Oxygen
- ___ 20. Which statement about isotopes is true?
- Each isotope of an element has chemical properties that differ from those of other isotopes of the same element.
 - Isotopes of an element have different numbers of protons.
 - Some isotopes are unstable and decay.
 - All isotopes emit radiation.
- ___ 21. Adding or removing electrons from an atom results in the formation of a(n)
- isotope.
 - different element.
 - ion.
 - change in the atom's atomic weight.
- ___ 22. Which factor differentiates one element from another?
- The number of neutrons
 - The number of protons
 - The type of bonds formed by the atoms of the element
 - The number of energy levels in the electron cloud
- ___ 23. What makes atoms electrically neutral?
- An equal number of protons and electrons
 - The formation of ionic bonds
 - An equal number of electrons and neutrons
 - Neutrons, which neutralize the electrically charged protons and electrons
- ___ 24. What causes an atom to emit radiation?
- The electron cloud emits small amounts of radiation as the electrons accelerate.
 - Unstable isotopes emit radiation as they decay.
 - Atoms emit radiation when covalent bonds break down.
 - Atoms emit radiation when ionic bonds break down.
- ___ 25. Transfer of electrons from an atom of one element to an atom of another element results in
- a covalent bond.
 - an ionic bond
 - a hydrogen bond.
 - one unstable atom and one stable atom.
- ___ 26. Covalent bonds form when
- positively charged hydrogen atoms attract negatively charged atoms.
 - electrostatic forces bring atoms together to form a new molecule.
 - two atoms share electrons to fill their outer shells.