# Chapter 01 The Human Organism

# **Multiple Choice Questions**

1. Anatomy is

A. the study of function.

B. a branch of physiology.

**C.** the study of structure.

D. the study of living organisms.

E. the study of homeostasis.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

- 2. Which subdivision of anatomy involves the study of organs that function together?
- A. regional
- B. developmental
- C. systemic
- D. histology
- E. surface anatomy

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

- 3. Which of the following activities would represent a physiological study?
- A. observing the structure of the interior of the heart
- B. studying a model of the kidney
- C. examining the surface of a bone
- D. viewing muscle tissue through a microscope
- **E.** determining normal blood sugar levels for 20-year-old students

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

- 4. Visual inspection of the appearance of the liver and gallbladder during surgery is associated with which of the following?
- A. histology
- B. physiology
- C. gross anatomy
- D. radiology
- E. cytology

Bloom's Level: 2. Understand

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

- 5. Microscopic examination of a frozen tissue specimen is an application of which of the following disciplines?
- **<u>A.</u>** histology
- B. physiology
- C. gross anatomy
- D. radiology
- E. regional anatomy

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

- 6. Studies at the biochemical and molecular levels would be most appropriate for learning about the
- A. locations of body parts.
- B. gross anatomy of bones.
- **C.** physiological functions of organs.
- D. ecological niches of humans.
- E. systemic anatomy.

Bloom's Level: 2. Understand

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

- 7. Knowledge of the structure of body parts helps us to understand their function. Which of the following is an accurate example of that principle?
- A. The basic structural unit of the body is the cell.
- B. The internal environment of the body is maintained in a relatively stable condition.
- **C.** Moveable joints allow us to bend our fingers to perform many different actions.
- D. Each tissue type is composed of cells that have a similar structure and function.
- E. Negative feedback is not homeostatic.

HAPS Objective: A05.02 Give specific examples to show the interrelationship between

anatomy and physiology.

Learning Outcome: 01.01C. Explain the importance of the relationship between structure and

function. Section: 01.01 Topic: General

- 8. An investigator who conducts an experiment to determine how changes in pH affect the function of enzymes on digestion is most likely to be a(n)
- A. neurologist.
- B. anatomist.
- C. engineer.
- **<u>D.</u>** physiologist.
- E. histologist.

Bloom's Level: 2. Understand

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

- 9. The study of the structural features and functions of the cell is
- A. cytology.
- B. histology.
- C. molecular biology.
- D. microbiology.
- E. surface anatomy.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

- 10. The study of tissues is
- A. cytology.
- **B.** histology.
- C. molecular biology.
- D. microbiology.
- E. surface anatomy.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

- 11. The study of the body's organization by areas is
- A. systemic anatomy.
- **B.** regional anatomy.
- C. molecular biology.
- D. microbiology.
- E. surface anatomy.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

- 12. The study of the external form of the body and its relationship to deeper structures is
- A. systemic anatomy.
- B. regional anatomy.
- C. molecular biology.
- D. microbiology.
- **E.** surface anatomy.

Bloom's Level: 1. Remember

HAPS Objective: A05.01 Define the terms anatomy and physiology.

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

- 13. Which of the following systems carries necessary compounds like oxygen and nutrients throughout the body?
- A. nervous
- B. cardiovascular
- C. urinary
- D. lymphatic
- E. respiratory

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and

describe the major functions of each system.

Section: 01.02 Topic: General

- 14. Consider the following structural levels: chemical, organ, tissue, cell, and organ system. Which level encompasses the other four?
- A. tissue
- **B.** organ system
- C. organ
- D. chemical
- E. cell

Bloom's Level: 4. Analyze

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the major characteristics of each level.

- 15. A tissue is a
- A. structure contained within a cell.
- B. lower level of organization than a cell.
- C. group of organs that performs specific functions.
- **<u>D.</u>** group of cells with similar structure and function.
- E. structure that contains a group of organs.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the major characteristics of each level.

Section: 01.02 Topic: General

- 16. Organize the following structural levels of the human body from simplest to most complex.
- (1) cell
- (2) tissue
- (3) chemical
- (4) organ system
- (5) organ
- A. 1, 2, 3, 4, 5
- B. 2, 3, 1, 4, 5
- **C.** 3, 1, 2, 5, 4
- D. 4, 2, 3, 1, 5
- E. 3, 1, 2, 4, 5

Bloom's Level: 2. Understand

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the major characteristics of each level.

- 17. Which organ system is the location of blood cell production?
- A. cardiovascular
- **B.** skeletal
- C. digestive
- D. nervous
- E. endocrine

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and

describe the major functions of each system.

Section: 01.02 Topic: General

- 18. Which body system would be affected by degeneration of cartilage in joints?
- A. muscular
- B. nervous
- C. cardiovascular
- **D.** skeletal
- E. lymphatic

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and

describe the major functions of each system.

- 19. The gallbladder, liver, and stomach are all part of the
- A. endocrine system.
- B. cardiovascular system.
- C. skeletal system.
- D. respiratory system.
- **E.** digestive system.

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and

describe the major functions of each system.

Section: 01.02 Topic: General

20. The integumentary system

A. regulates body temperature.

- B. breaks down food into small particles for absorption.
- C. controls intellectual functions.
- D. produces body movements.
- E. coordinates and integrates body function.

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and

describe the major functions of each system.

- 21. Which of the following is NOT the correct name of an organ system?
- A. integumentary
- B. lymphatic
- C. cardiovascular
- D. muscular
- E. hormonal

Bloom's Level: 2. Understand

HAPS Objective: A07.01 List the organ systems of the human body and their major components.

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and

describe the major functions of each system.

Section: 01.02 Topic: General

#### 22. A cell is

A. a small structure within a molecule.

B. a structure composed of several tissue types.

C. the basic structural unit of living organisms.

D. a group of organs with a common set of functions.

E. a group of atoms with similar structure and function.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the

major characteristics of each level.

# 23. An organ is

A. a small structure within a cell.

**B.** a structure composed of several tissue types.

- C. the basic structural unit of all living organisms.
- D. a group of molecules with a common set of functions.
- E. a group of cells with similar structure and function.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the

major characteristics of each level.

Section: 01.02 Topic: General

### 24. An organ system is

A. a small structure within a cell.

- B. a structure composed of several tissue types.
- C. the basic structural unit of all living organisms.
- **D.** a group of organs with a common set of functions.

E. a group of cells with similar structure and function.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the

major characteristics of each level.

## 25. An organelle is

**A.** a small structure within a cell.

- B. a structure composed of several tissue types.
- C. the basic structural unit of all living organisms.
- D. a group of organs with a common set of functions.
- E. a group of cells with similar structure and function.

Bloom's Level: 1. Remember

HAPS Objective: A06.01 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

Learning Outcome: 01.02A. Name the six levels of organization of the body, and describe the

major characteristics of each level.

Section: 01.02 Topic: General

- 26. What system removes nitrogenous waste products from the blood and regulates blood pH, ion balance, and water balance?
- A. respiratory
- B. lymphatic
- C. cardiovascular
- D. immune
- E. urinary

Bloom's Level: 1. Remember

HAPS Objective: A07.01 List the organ systems of the human body and their major

components.

Learning Outcome: 01.02B. List the 11 organ systems, identify their components, and

describe the major functions of each system.

- 27. An organism's ability to use energy in order to swim is an example of
- A. metabolism.
- B. responsiveness.
- C. organization.
- D. maturation.
- E. development.

Bloom's Level: 2. Understand

Learning Outcome: 01.03A. List and define six characteristics of life.

Section: 01.03 Topic: General

- 28. The changes an organism undergoes through time is called
- A. organization.
- B. metabolism.
- C. reproduction.
- D. growth.
- **E.** development.

Bloom's Level: 1. Remember

Learning Outcome: 01.03A. List and define six characteristics of life.

- 29. Nerve cells generate electrical signals in response to changes in the environment. This is an example of
- A. respiration.
- B. digestion.
- C. movement.
- D. filtration.
- **E.** responsiveness.

Bloom's Level: 2. Understand

Learning Outcome: 01.03A. List and define six characteristics of life.

Section: 01.03 Topic: General

- 30. An increase in the number of cells is
- A. reproduction.
- **B.** growth.
- C. differentiation.
- D. metabolism.
- E. organization.

Bloom's Level: 1. Remember

Learning Outcome: 01.03A. List and define six characteristics of life.

- 31. The change in the shape of tissues or organs is called
- A. reproduction.
- B. growth.
- C. differentiation.
- D. metabolism.
- E. morphogenesis.

Bloom's Level: 1. Remember

Learning Outcome: 01.03A. List and define six characteristics of life.

Section: 01.03 Topic: General

- 32. Homeostasis is defined as
- A. the production of energy by cells.
- B. the combination of growth, self-repair, and energy release.
- C. an amplification of deviation from the normal range.
- **D.** the maintenance of a relatively constant environment within the body.

E. a condition in the body that does not involve fluctuation.

Bloom's Level: 1. Remember

HAPS Objective: B01.01 Define homeostasis.

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper

body function. Section: 01.05 Topic: General

- 33. Which of the following is consistent with homeostasis?
- **A.** As body temperature rises, sweating occurs to cool the body.
- B. When a person drinks large quantities of water, urine output decreases to raise blood volume.
- C. Elevated blood glucose levels cause insulin secretion to decline.
- D. Decreases in blood pressure cause a corresponding decrease in heart rate.
- E. As blood pressure falls, blood flow to the heart decreases.

Bloom's Level: 2. Understand

HAPS Objective: B01.01 Define homeostasis.

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper

body function. Section: 01.05 Topic: General

- 34. A blood clot stimulating even more blood clotting is an example of
- A. negative feedback.
- **B.** positive feedback.
- C. neutral feedback.
- D. metabolism.
- E. There is no feedback involved.

Bloom's Level: 2. Understand

HAPS Objective: B03.03 Provide an example of a positive feedback loop in the body. Describe the specific structures (organs, cells or molecules) included in the feedback loop. HAPS Objective: B04.01 Provide specific examples to demonstrate how organ systems respond to maintain homeostasis.

Learning Outcome: 01.05C. Describe a positive-feedback mechanism and give an example.

- 35. Which of the following is most similar to the negative feedback mechanism in human physiology?
- A. A car runs out of gas and stops.
- B. A teacher marks all the wrong answers on students' exam papers.
- C. A toilet tank stops refilling once its full after a flush.
- D. An automatic door opens as soon as somebody approaches it.
- E. A clock ticks on a shelf.

HAPS Objective: B02.02 Compare and contrast positive and negative feedback in terms of the relationship between stimulus and response.

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

Section: 01.05 Topic: General

- 36. A researcher discovered a new hormone that raises blood calcium levels. According to the principles of negative feedback, this hormone would be secreted when
- A. blood calcium levels increase.
- **B.** blood calcium levels decrease.
- C. blood calcium levels are stable.
- D. blood calcium levels are elevated.
- E. None of these choices are correct.

Bloom's Level: 3. Apply

HAPS Objective: B03.02 Provide an example of a negative feedback loop that utilizes the endocrine system to relay information. Describe the specific cells or molecules (production cells, hormones, target cells) included in the feedback loop.

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

- 37. In a negative feedback mechanism, the response of the effector
- **A.** reverses the original stimulus.
- B. enhances the original stimulus.
- C. has no effect on the original stimulus.
- D. is usually damaging to the body.
- E. creates a cycle that leads away from homeostasis.

HAPS Objective: B02.01 List the components of a feedback loop and explain the function of

each.

HAPS Objective: B02.02 Compare and contrast positive and negative feedback in terms of the

relationship between stimulus and response.

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

Section: 01.05 Topic: General

- 38. Which of the following is most consistent with homeostasis?
- A. As blood pressure falls, blood flow to cardiac (heart) muscle decreases.
- B. As the mean blood pressure gradually increases in aging people, the blood vessel walls become thinner.
- C. Men working in a hot environment drink large quantities of water, and their urine volume increases.
- D. As body temperature decreases, blood vessels in the periphery dilate.
- **E.** Elevated blood glucose levels cause insulin secretion (insulin causes cells to take up glucose) to increase.

Bloom's Level: 3. Apply

HAPS Objective: B01.01 Define homeostasis.

HAPS Objective: B03.02 Provide an example of a negative feedback loop that utilizes the endocrine system to relay information. Describe the specific cells or molecules (production cells, hormones, target cells) included in the feedback loop.

Learning Outcome: 01.05A. Define homeostasis, and explain why it is important for proper body function.

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

- 39. A researcher discovered a sensory receptor that detects decreasing oxygen concentrations in the blood. According to the principles of negative feedback, it is likely that stimulation of this sensory receptor will produce which of the following types of responses?
- A. a decrease in heart rate
- **B.** an increase in the respiratory rate
- C. an increase in physical activity
- D. unconsciousness
- E. both a decrease in heart rate and an increase in the respiratory rate

Bloom's Level: 4. Analyze

HAPS Objective: B03.01 Provide an example of a negative feedback loop that utilizes the nervous system to relay information. Describe the specific organs, structures, cells or molecules (receptors, neurons, CNS structures, effectors, neurotransmitters) included in the feedback loop.

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

Section: 01.05 Topic: General

- 40. Which of the following is NOT a component of a negative feedback mechanism?
- A. effector
- B. stabilizer
- C. control center
- D. receptor

Bloom's Level: 2. Understand

HAPS Objective: B02.01 List the components of a feedback loop and explain the function of

each.

Learning Outcome: 01.05B. Describe a negative-feedback mechanism and give an example.

Section: 01.05 Topic: General

# **True / False Questions**

# 41. Positive-feedback mechanisms are always damaging to the body.

# **FALSE**

Bloom's Level: 1. Remember

HAPS Objective: B02.02 Compare and contrast positive and negative feedback in terms of the

relationship between stimulus and response.

HAPS Objective: B04.01 Provide specific examples to demonstrate how organ systems

respond to maintain homeostasis.

Learning Outcome: 01.05C. Describe a positive-feedback mechanism and give an example.

Section: 01.05 Topic: General

# **Multiple Choice Questions**

42. In the anatomical position, the

- A. arms are crossed over the chest.
- B. palms of the hands face posteriorly.
- C. body is erect with the head turned to the right.
- D. thumbs point to the midline of the body.

**E.** palms of the hands face anteriorly.

Bloom's Level: 1. Remember

HAPS Objective: A01.01 Describe a person in anatomical position. Learning Outcome: 01.06A. Describe a person in anatomical position.

Section: 01.06

- 43. Which of the following sets of directional terms are most appropriately referred to as opposites?
- **A.** distal and proximal
- B. medial and inferior
- C. superior and ventral
- D. anterior and deep
- E. lateral and superior

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

- 44. The term "dorsal" means
- A. further from the point of attachment to the body.
- B. to lie with the anterior surface down.
- **C.** toward the back of the body.
- D. away from the midline.
- E. toward the front of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

- 45. The anatomical term that means "away from the midline of the body" is
- A. medial.
- B. proximal.
- C. distal.
- **D.** lateral.
- E. superficial.

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

- 46. The thumb is to the fifth digit (little finger).
- A. distal
- B. lateral
- C. medial
- D. proximal
- E. superficial

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional

and systemic terminology.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

- 47. Which of the following describes the position of the nose?
- A. inferior to the chin
- B. superior to the forehead
- C. posterior to the ears
- D. lateral to the eyes
- **E.** superior to the mouth

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

48. The shoulder is to the elbow.

- A. lateral
- B. dorsal
- C. distal
- D. ventral
- E. proximal

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to locate specific body structures.

Section: 01.06

- 49. A term that means "toward the attached end of a limb" is
- A. medial.
- B. lateral.
- C. superficial.
- D. distal.
- E. proximal.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

- 50. Which of the following is most inferior in location?
- A. pelvic cavity
- B. mediastinum
- C. diaphragm
- D. pleural cavity
- E. pericardial cavity

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional

and systemic terminology.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

- 51. While Stacy is in the process of passing over the bar during a pole vault, her hips are considered to be
- A. anterior to her shoulders.
- B. posterior to her shoulders.
- **C.** inferior to her shoulders.
- D. superior to her shoulders.
- E. cephalic to her shoulders.

Bloom's Level: 2. Understand

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

- 52. Cephalic means
- A. toward the middle or midline of the body.
- B. away from the surface.
- C. closer to the head.
- D. closer than another structure to the point of attachment to the trunk.
- E. toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

#### 53. Posterior means

- A. toward the middle or midline of the body.
- B. away from the surface.
- C. closer to the head.
- D. closer than another structure to the point of attachment to the trunk.
- **E.** toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

HAPS Objective: A05.03 Describe the location of structures of the body, using basic regional and systemic terminology.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

#### 54. Medial means

**A.** toward the middle or midline of the body.

- B. away from the surface.
- C. closer to the head.
- D. closer than another structure to the point of attachment to the trunk.
- E. toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

#### 55. Proximal means

- A. toward the middle or midline of the body.
- B. away from the surface.
- C. closer to the head.
- **<u>D.</u>** closer than another structure to the point of attachment to the trunk.

E. toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

# 56. Deep means

- A. toward the middle or midline of the body.
- **B.** away from the surface.
- C. closer to the head.
- D. closer than another structure to the point of attachment to the trunk.

E. toward the back of the body.

Bloom's Level: 1. Remember

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

- 57. In the expression "Let your fingers do the walking," which of the following anatomical terms could be substituted for "fingers?"
- A. tarsals
- B. manuals
- C. digits
- D. carpals
- E. metatarsals

Bloom's Level: 2. Understand

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

- 58. The anatomical arm refers to the part of the upper limb from the
- A. shoulder to the wrist.
- B. elbow to the wrist.
- **C.** shoulder to the elbow.
- D. elbow to the fingers.
- E. shoulder to the fingers.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

hody

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

- 59. The lumbar region is the
- A. area in front of the elbow.
- B. chest area.
- C. lower back.
- D. bottom of foot.
- E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

60. The antecubital region is the

A. area in front of the elbow.

- B. chest area.
- C. lower back.
- D. bottom of foot.
- E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

bodv.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

- 61. The antebrachial region is the
- A. area in front of the elbow.
- B. chest area.
- C. lower back.
- D. bottom of foot.
- E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

- 62. The pectoral region is the
- A. area in front of the elbow.
- **B.** chest area.
- C. lower back.
- D. bottom of foot.
- E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

- 63. The plantar surface is the
- A. area in front of the elbow.
- B. chest area.
- C. lower back.
- **D.** bottom of foot.
- E. forearm.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

- 64. The brachial region is commonly known as the
- A. groin.
- B. buttock.
- C. breastbone.
- **D.** upper arm.

E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

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the

A. groin.

- B. buttock.
- C. breastbone.
- D. upper arm.
- E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

66. The gluteal region is commonly known as the

A. groin.

- B. buttock.
- C. breastbone.
- D. upper arm.

E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

67. The sternal region is commonly known as the

A. groin.

B. buttock.

**C.** breastbone.

D. upper arm.

E. naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

68. The umbilical region is commonly known as the

A. groin.

B. buttock.

C. breastbone.

D. upper arm.

**E.** naval.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

69. The cervical region is the

A. calf.

B. armpit.

C. hollow behind the knee.

**D.** neck.

E. thigh.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

70. The popliteal region is the

A. calf.

B. armpit.

**C.** hollow behind the knee.

D. neck.

E. thigh.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

- 71. The sural region is the
- A. calf.
- B. armpit.
- C. hollow behind the knee.
- D. neck.
- E. thigh.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

- 72. The femoral region is the
- A. calf.
- B. armpit.
- C. hollow behind the knee.
- D. neck.
- **E.** thigh.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

- 73. The axillary region is the
- A. calf.
- **B.** armpit.
- C. hollow behind the knee.
- D. neck.
- E. thigh.

Bloom's Level: 1. Remember

HAPS Objective: A03.02 List and describe the location of the major anatomical regions of the

body.

Learning Outcome: 01.06C. Know the terms for the parts and regions of the body.

Section: 01.06

Topic: Body Orientation

- 74. What plane divides the body into equal right and left halves?
- A. coronal
- B. transverse
- C. median
- D. sagittal
- E. frontal

Bloom's Level: 1. Remember

HAPS Objective: A02.01 Identify the various planes in which a body might be dissected.

Learning Outcome: 01.06D. Name and describe the three major planes of the body.

Section: 01.06

- 75. Which of the following abdominal regions would contain the appendix?
- A. hypogastric
- **B.** right iliac
- C. right lumbar
- D. umbilical
- E. left iliac

Bloom's Level: 2. Understand

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Objective: A03.03 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

Learning Outcome: 01.06G. Locate organs in their specific cavity, abdominal quadrant, or region.

Section: 01.06

Topic: Body Orientation

- 76. Which of the following is NOT found in the epigastric region?
- A. liver
- B. stomach
- C. urinary bladder
- D. duodenum
- E. large intestine

Bloom's Level: 2. Understand

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Objective: A03.03 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

Learning Outcome: 01.06G. Locate organs in their specific cavity, abdominal quadrant, or region.

Section: 01.06

77. A vertical plane that separates the body into right and left portions is called a plane.  A sagittal B. transverse C. frontal D. horizontal E. coronal
Bloom's Level: 1. Remember HAPS Objective: A02.01 Identify the various planes in which a body might be dissected. Learning Outcome: 01.06D. Name and describe the three major planes of the body. Section: 01.06 Topic: Body Orientation
78. "Cutting off your nose" would be a section in the plane.  A. coronal B. nasal C. median D. transverse E. sagittal
Bloom's Level: 2. Understand HAPS Objective: A02.01 Identify the various planes in which a body might be dissected. Learning Outcome: 01.06D. Name and describe the three major planes of the body. Section: 01.06 Topic: Body Orientation

79. Amputation of a foot at the ankle would involve a cut in the \_\_\_\_\_ plane.

A. coronal

B. median

C. transverse

D. frontal

E. lateral

Bloom's Level: 2. Understand

HAPS Objective: A02.01 Identify the various planes in which a body might be dissected. Learning Outcome: 01.06D. Name and describe the three major planes of the body.

Section: 01.06

Topic: Body Orientation

80. The thoracic cavity is separated from the abdominal cavity by the

A. sternum.

B. diaphragm.

C. mediastinum.

D. mesentery.

E. pericardial cavity.

Bloom's Level: 1. Remember

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Objective: A03.03 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

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- A. mediastinal
- B. pericardial
- C. pleural
- D. vertebral
- E. cranial

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major

organs found in each cavity.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Topic: Body Orientation

82. The cavity of the body immediately inferior to the diaphragm is the cavity.

- A. pleural
- B. thoracic
- C. inguinal
- D. pelvic
- **E.** abdominal

Bloom's Level: 1. Remember

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major

organs found in each cavity.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

- 83. The suffix "-itis" means inflammation. Which of the following terms means inflammation of the membrane lining the body cavity that contains the liver?
- A. pericarditis
- **B.** peritonitis
- C. pleurisy
- D. colitis
- E. hepatitis

Bloom's Level: 2. Understand

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Topic: Body Orientation

- 84. Which of the following organs is retroperitoneal in location?
- A. stomach
- B. liver
- C. heart
- **D.** kidney

E. ovary

Bloom's Level: 2. Understand

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major organs found in each cavity.

HAPS Objective: A04.02 Describe the location of body structures, using appropriate directional terminology.

Learning Outcome: 01.06G. Locate organs in their specific cavity, abdominal quadrant, or region.

Section: 01.06

- 85. The wall of the abdominopelvic cavity is lined by a serous membrane called the
- A. visceral pleural membrane.
- **B.** parietal peritoneum.
- C. visceral mediastinal membrane.
- D. visceral peritoneum.
- E. epicardium.

HAPS Objective: A03.03 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

HAPS Objective: A04.02 Describe the location of body structures, using appropriate directional terminology.

Learning Outcome: 01.06G. Locate organs in their specific cavity, abdominal quadrant, or

region.

Section: 01.06

Topic: Body Orientation

- 86. The visceral pleura is
- A. a double-layered serous membrane that anchors some of the abdominal organs to the body wall.
- **B.** the serous membrane that covers the lungs.
- C. the serous membrane that lines the abdominal and pelvic cavities.
- D. space located between the visceral and parietal pleura.
- E. the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions.

Section: 01.06

## 87. The parietal peritoneum is

- A. a double-layered serous membrane that anchors some of the abdominal organs to the body wall.
- B. the serous membrane that covers the lungs.
- C. the serous membrane that lines the abdominal and pelvic cavities.
- D. space located between the visceral and parietal pleura.
- E. the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions.
Section: 01.06

Topic: Body Orientation

#### 88. The mesentery is

**<u>A.</u>** a double-layered serous membrane that anchors some of the abdominal organs to the body wall.

- B. the serous membrane that covers the lungs.
- C. the serous membrane that lines the abdominal and pelvic cavities.
- D. space located between the visceral and parietal pleura.
- E. the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions. Section: 01.06

## 89. The pleural cavity is the

- A. a double-layered serous membrane that anchors some of the abdominal organs to the body wall.
- B. the serous membrane that covers the lungs.
- C. the serous membrane that lines the abdominal and pelvic cavities.
- **D.** space located between the visceral and parietal pleura.
- E. the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions.

Section: 01.06

Topic: Body Orientation

#### 90. The parietal pericardium is

- A. a double-layered serous membrane that anchors some of the abdominal organs to the body wall.
- B. the serous membrane that covers the lungs.
- C. the serous membrane that lines the abdominal and pelvic cavities.
- D. space located between the visceral and parietal pleura.
- **E.** the membrane that lines the pericardial sac.

Bloom's Level: 1. Remember

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their functions.

Section: 01.06

- 91. A major limitation of radiographs is that they
- A. can only visualize bone.
- **B.** give only a flat, two-dimensional image of the body.
- C. are old technology that do not give good results.
- D. have very few applications.

Bloom's Level: 1. Remember

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

- 92. An anatomic image created from sound waves is a
- A. radiograph.
- B. CT scan.
- C. MRI.
- **D.** sonogram.

Bloom's Level: 1. Remember

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

#### **True / False Questions**

# 93. A CT scan allows for a three-dimensional image to be generated.

# **TRUE**

Bloom's Level: 1. Remember

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

# **Multiple Choice Questions**

94. What technique creates a three-dimensional dynamic image of blood vessels?

A. digital subtraction angiography

- B. magnetic resonance imaging
- C. dynamic spatial reconstruction
- D. positron emission tomography

Bloom's Level: 1. Remember

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

- 95. Magnetic resonance imaging is based on the movement of
- A. electrons in a magnetic field.
- B. carbons in a magnetic field.
- C. protons in a magnetic field.
- D. cells in a magnetic field.

Bloom's Level: 1. Remember

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

96. The delivery of a radioactive compound to the body to study the metabolism of tissues is called

A. MRI.

**B.** PET.

C. DSA.

D. DSR.

Bloom's Level: 1. Remember

Learning Outcome: 01.01A. Define anatomy and describe the levels at which anatomy can be

studied.

Section: 01.01 Topic: General

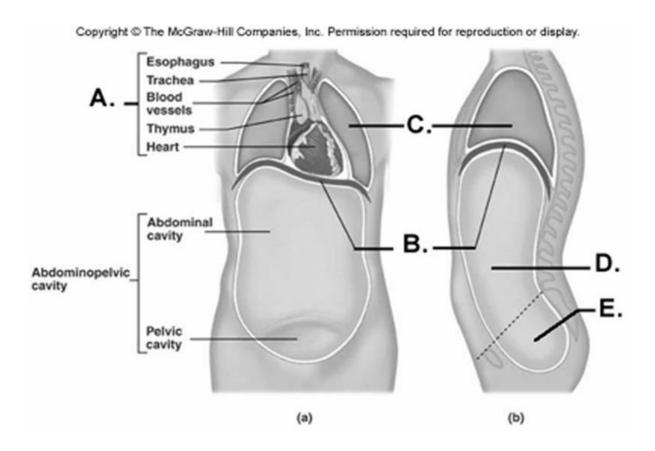


Figure: 01.14 Section: 01.06

- 97. Here is a figure showing major trunk cavities and other structures. What does "A" represent?
- A. diaphragm
- **B.** mediastinum
- C. pelvic cavity
- D. thoracic cavity
- E. abdominal cavity

Figure: 01.14

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major

organs found in each cavity.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Topic: Body Orientation

- 98. Here is a figure showing major trunk cavities and other structures. What does "B" represent?
- A. diaphragm
- B. mediastinum
- C. pelvic cavity
- D. thoracic cavity
- E. abdominal cavity

Bloom's Level: 1. Remember

Figure: 01.14

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major

organs found in each cavity.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

99. Here is a figure showing major trunk cavities and other structures. What does "C" represent?

A. diaphragm

B. mediastinum

C. pelvic cavity

**D.** thoracic cavity

E. abdominal cavity

Bloom's Level: 1. Remember

Figure: 01.14

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major

organs found in each cavity.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

Topic: Body Orientation

100. Here is a figure showing major trunk cavities and other structures. What does "D" represent?

A. diaphragm

B. mediastinum

C. pelvic cavity

D. thoracic cavity

**E.** abdominal cavity

Bloom's Level: 1. Remember

Figure: 01.14

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major

organs found in each cavity.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06

101. Here is a figure showing major trunk cavities and other structures. What does "E" represent?

A. diaphragm

B. mediastinum

**C.** pelvic cavity

D. thoracic cavity

E. abdominal cavity

Bloom's Level: 1. Remember

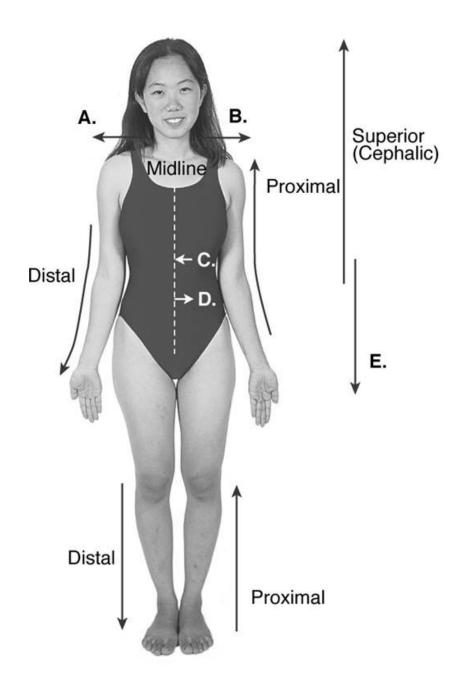
Figure: 01.14

HAPS Objective: A03.01 Describe the location of the body cavities and identify the major

organs found in each cavity.

Learning Outcome: 01.06F. Describe the major trunk cavities and their divisions.

Section: 01.06



Bloom's Level: 1. Remember

*Figure 01.09* 

HAPS Objective: A01.02 Describe how to use the terms right and left in anatomical reference.

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

102. Directional terms are important in the study of anatomy. What does "A" represent?

A. median

**B.** right

C. left

D. inferior

E. lateral

Bloom's Level: 1. Remember

*Figure 01.09* 

HAPS Objective: A01.02 Describe how to use the terms right and left in anatomical reference.

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

103. Directional terms are important in the study of anatomy. What does "B" represent?

A. median

B. right

C. left

D. inferior

E. lateral

Bloom's Level: 1. Remember

*Figure 01.09* 

HAPS Objective: A01.02 Describe how to use the terms right and left in anatomical reference.

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

104. Directional terms are important in the study of anatomy. What does "C" represent?

A. median

B. right

C. left

D. inferior

E. lateral

Bloom's Level: 1. Remember

*Figure 01.09* 

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

105. Directional terms are important in the study of anatomy. What does "D" represent?

A. median

B. right

C. left

D. inferior

E. lateral

Bloom's Level: 1. Remember

*Figure 01.09* 

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

Topic: Body Orientation

106. Directional terms are important in the study of anatomy. What does "E" represent?

A. median

B. right

C. left

**D.** inferior

E. lateral

Bloom's Level: 1. Remember

*Figure 01.09* 

HAPS Objective: A04.01 List and define the major directional terms used in anatomy.

Learning Outcome: 01.06B. Define the directional terms for the human body, and use them to

locate specific body structures.

Section: 01.06

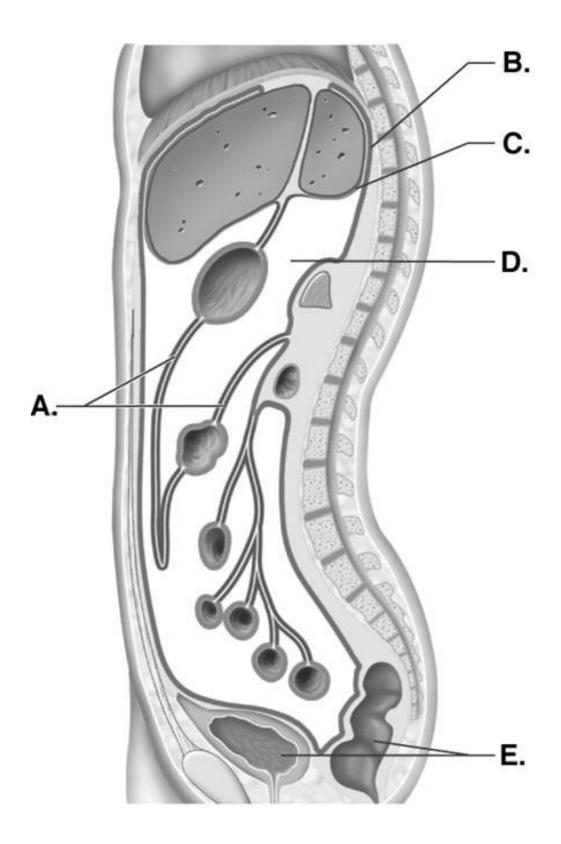


Figure 01.16 Section: 01.06

Topic: Body Orientation

- 107. This is a sagittal section through the abdominopelvic cavity. What structure does "A" represent?
- A. visceral peritoneum (covers organs)
- **B.** mesentery
- C. parietal peritoneum (lines cavity)
- D. retroperitoneal organs
- E. peritoneal cavity

Bloom's Level: 1. Remember

*Figure 01.16* 

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions.
Section: 01.06

Topic: Body Orientation

- 108. This is a sagittal section through the abdominopelvic cavity. What serous membrane does "B" represent?
- A. visceral peritoneum (covers organs)
- B. mesentery
- **C.** parietal peritoneum (lines cavity)
- D. retroperitoneal organs
- E. peritoneal cavity

Bloom's Level: 1. Remember

*Figure 01.16* 

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions.
Section: 01.06

109. This is a sagittal section through the abdominopelvic cavity. What serous membrane does "C" represent?

**<u>A.</u>** visceral peritoneum (covers organs)

B. mesentery

C. parietal peritoneum (lines cavity)

D. retroperitoneal organs

E. peritoneal cavity

Bloom's Level: 1. Remember

*Figure 01.16* 

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions.
Section: 01.06

Topic: Body Orientation

110. This is a sagittal section through the abdominopelvic cavity. What cavity does "D" represent?

A. visceral peritoneum (covers organs)

B. mesentery

C. parietal peritoneum (lines cavity)

D. retroperitoneal organs

**E.** peritoneal cavity

Bloom's Level: 1. Remember

*Figure 01.16* 

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions.

Section: 01.06

- 111. This is a sagittal section through the abdominopelvic cavity. What structures does "E" represent?
- A. visceral peritoneum (covers organs)
- B. mesentery
- C. parietal peritoneum (lines cavity)
- **D.** retroperitoneal organs
- E. peritoneal cavity

*Figure 01.16* 

HAPS Objective: D01.01 Describe the structure and function of mucous, serous, cutaneous Learning Outcome: 01.06H. Describe the serous membranes, their locations, and their

functions.
Section: 01.06