***Seeley’s Essentials of Anatomy & Physiology, 10e* (VanPutte)**

**Chapter 1 The Human Organism**

1) The scientific discipline that deals with the processes or functions of living organisms is \_\_\_\_\_\_\_\_.

A) physiology

B) anatomic imaging

C) regional anatomy

D) surface anatomy

E) systemic anatomy

Answer: A

Section: 01.02 Physiology

Topic: Scope of anatomy and physiology

Bloom's: 2. Understand

Learning Outcome: 01.02A. Define physiology.

HAPS Learning Outcome: A05.1 Define the terms anatomy and physiology.

2) Which of the following statements is *TRUE*?

A) The coordinated activity of the organ systems is necessary for normal function.

B) Because organ systems are so interrelated, dysfunction in one organ system can have profound effects on other systems.

C) An organism is any living thing considered as a whole whether composed of one cell such as a bacterium or trillions of cells such as a human.

D) Living things are highly organized, and disruption of this organized state can lead to loss of function and death.

E) All of the choices are correct.

Answer: E

Section: 01.01 Anatomy

Topic: Scope of anatomy and physiology

Bloom's: 4. Analyze

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

HAPS Learning Outcome: A05.2 Give specific examples to show the interrelationship between anatomy and physiology.

3) \_\_\_\_\_\_\_\_ refers to the specific interrelationships among the parts of an organism and how these parts interact to perform functions.

A) Organization

B) Metabolism

C) Responsiveness

D) Growth

E) Development

Answer: A

Section: 01.04 Characteristics of Life

Topic: Scope of anatomy and physiology

Bloom's: 1. Remember

Learning Outcome: 01.04A. List and define six characteristics of life.

HAPS Learning Outcome: A05.2 Give specific examples to show the interrelationship between anatomy and physiology.

4) Growth refers to an increase in size of all or part of an organism. It can result from

A) an increase in the number of cells within the organism.

B) an increase in the size of individual cells within the organism.

C) an increase in the amount of substances surrounding the cells.

D) All of the choices are correct.

E) None of the choices are correct.

Answer: D

Section: 01.04 Characteristics of Life

Topic: Scope of anatomy and physiology

Bloom's: 3. Apply

Learning Outcome: 01.04A. List and define six characteristics of life.

5) \_\_\_\_\_\_\_\_ includes the changes an organism undergoes through time beginning with fertilization and ending at death.

A) Organization

B) Metabolism

C) Responsiveness

D) Reproduction

E) Development

Answer: E

Section: 01.04 Characteristics of Life

Topic: Scope of anatomy and physiology

Bloom's: 1. Remember

Learning Outcome: 01.04A. List and define six characteristics of life.

6) \_\_\_\_\_\_\_\_ refers to the ability of an organism to sense changes in the environment and make adjustments needed to help maintain its life.

A) Organization

B) Metabolism

C) Responsiveness

D) Growth

E) Development

Answer: C

Section: 01.04 Characteristics of Life

Topic: Scope of anatomy and physiology

Bloom's: 1. Remember

Learning Outcome: 01.04A. List and define six characteristics of life.

7) Which of these characteristics of life means "The ability to use energy to perform vital functions"?

A) Organization

B) Metabolism

C) Responsiveness

D) Growth

E) Differentiation

Answer: B

Section: 01.04 Characteristics of Life

Topic: Scope of anatomy and physiology

Bloom's: 2. Understand

Learning Outcome: 01.04A. List and define six characteristics of life.

8) According to the six criteria given as the characteristics of life (organization, metabolism, responsiveness, growth, development, and reproduction), is a virus such as HIV "alive"?

A) Yes, it has all 6 characteristics.

B) No, it has none of the 6 characteristics.

C) Unknown, it has one characteristic (when not including its host cell's components) but does not have the rest.

Answer: C

Section: 01.04 Characteristics of Life

Topic: Scope of anatomy and physiology

Bloom's: 5. Evaluate

Learning Outcome: 01.04A. List and define six characteristics of life.

9) The chemical level of organization

A) involves the interaction between atoms and the formation of molecules.

B) is made up of organ systems that are classified as a unit by function.

C) determines the structural and functional characteristics of all organisms.

D) Both "involves the interaction between atoms and the formation of molecules" and "determines the structural and functional characteristics of all organisms" are correct.

E) None of the choices are correct.

Answer: D

Section: 01.03 Structural and Functional Organization of the Human Body

Topic: Levels of organization

Bloom's: 2. Understand

Learning Outcome: 01.03A. Describe the six levels of organization of the body, and describe the major characteristics of each level.

HAPS Learning Outcome: A06.1 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

10) Homeostasis is the condition produced by

A) a resistance to change of any kind.

B) the tendency for change in a body variable to be counteracted as soon as the body variable goes past its normal range of values.

C) the tendency for continued change in the same direction regardless of current values of a body variable.

D) the presence of pathogens.

E) All of the choices are correct.

Answer: B

Section: 01.05 Homeostasis

Topic: Definition of homeostasis

Bloom's: 2. Understand

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

HAPS Learning Outcome: B01.1 Define homeostasis.

11) Which of these statements is true of negative feedback?

A) Negative feedback is important for maintaining homeostasis in the body.

B) Negative feedback makes any deviation from a normal value larger.

C) Negative feedback occurs when the uterus contracts during childbirth.

D) Negative feedback is a very unusual control mechanism in the human body.

E) Negative feedback will usually result in illness or other disturbance of normal systems.

Answer: A

Section: 01.05 Homeostasis

Topic: Types of homeostatic mechanisms

Bloom's: 2. Understand

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

HAPS Learning Outcome: B02.3 Explain why negative feedback is the most commonly used mechanism to maintain homeostasis in the body.

12) Which of these is an example of a positive-feedback mechanism?

A) An increase in blood pressure activates mechanisms that decrease blood pressure.

B) Increased amounts of a hormone in the blood cause a decrease in the secretion of that hormone.

C) Increased carbon dioxide in the blood increases breathing rate, which decreases carbon dioxide in the blood.

D) Increased amounts of fluid in the blood result in increased quantities of urine, which decreases the fluid content of the blood.

E) Increased stretch of the uterus causes it to contract, which further increases stretch.

Answer: E

Section: 01.05 Homeostasis

Topic: Examples of homeostatic mechanisms

Bloom's: 4. Analyze

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

HAPS Learning Outcome: B03.3 Provide an example of a positive feedback loop in the body. Describe the specific structures (organs, cells or molecules) included in the feedback loop.

13) A patient with a bleeding ulcer had an elevated heart rate, but his blood pressure was very low and dropping. After the bleeding was stopped and a blood transfusion was given, blood pressure increased. Which of these statements are consistent with these observations?

A) Negative-feedback mechanisms are occasionally inadequate without medical intervention.

B) The transfusion interrupted a positive-feedback mechanism.

C) The transfusion interrupted a negative-feedback mechanism.

D) The transfusion was not necessary.

E) Both "Negative-feedback mechanisms are occasionally inadequate without medical intervention"" and ""The transfusion interrupted a positive-feedback mechanism"" are correct.

Answer: E

Section: 01.05 Homeostasis

Topic: Examples of homeostatic mechanisms

Bloom's: 5. Evaluate

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

HAPS Learning Outcome: B05.2 Predict the types of problems that would occur in the body if various organ systems could not maintain homeostasis and allowed regulated variables (body conditions) to move away from normal.

14) Increased carbon dioxide in the blood increases respiration (breathing) rate. Which of these statements would apply to this mechanism?

A) This is a rare example of a positive-feedback system in the body, because increased carbon dioxide increases respiration rate.

B) This is positive feedback, because an increased respiration rate increases oxygen in the blood.

C) This is negative feedback, because increased respiration rate decreases carbon dioxide in the blood.

D) This is negative feedback, because a deviation from normal is enhanced and made larger.

E) This is negative feedback, because increased respiration rate decreases oxygen in the blood.

Answer: C

Section: 01.05 Homeostasis

Topic: Examples of homeostatic mechanisms

Bloom's: 4. Analyze

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

HAPS Learning Outcome: B04.1 Provide specific examples to demonstrate how organ systems respond to maintain homeostasis.

15) Positive-feedback mechanisms

A) are few in a normal healthy individual.

B) are used to amplify the effect or response of a system.

C) sometimes can create a deviation from homeostasis that leads to death.

D) cause the deviation from normal to become even more pronounced.

E) All of the choices are correct.

Answer: E

Section: 01.05 Homeostasis

Topic: Types of homeostatic mechanisms; General types of homeostatic mechanisms

Bloom's: 2. Understand

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

HAPS Learning Outcome: B02.2 Compare and contrast positive and negative feedback in terms of the relationship between stimulus and response.

16) The regulation of room temperature by a thermostat is an example of a feedback loop. In this system, a sensor within the thermostat detects a change in temperature below a programmed set point. The thermostat then sends a signal, which turns on the furnace. The furnace heats the room bringing it back up to the programmed temperature. Once the room temperature reaches the programmed set point, the thermostat "turns off" the furnace. Which of the following statements is consistent with the above scenario?

A) This scenario is an example of a negative-feedback mechanism.

B) The thermostat is the "control center" while the furnace is the "effector."

C) This scenario is different from how negative feedback works in the body because negative feedback in the body maintains a normal range of values instead of one specific set point.

D) The "receptor" in this scenario is the temperature sensor within the thermostat.

E) All of the choices are correct.

Answer: E

Section: 01.05 Homeostasis

Topic: Examples of homeostatic mechanisms

Bloom's: 3. Apply

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

HAPS Learning Outcome: B04.1 Provide specific examples to demonstrate how organ systems respond to maintain homeostasis.

17) The study of external features, such as bony projections that serve as landmarks to locate deeper structures is called \_\_\_\_\_\_\_\_.

A) systemic anatomy

B) regional anatomy

C) surface anatomy

D) physiology

E) anatomic imaging

Answer: C

Section: 01.01 Anatomy

Topic: Basic terminology

Bloom's: 1. Remember

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

HAPS Learning Outcome: A05.1 Define the terms anatomy and physiology.

18) The study of the body's organization that considers the heart, blood and all of the associated blood vessels as a unit is called \_\_\_\_\_\_\_\_.

A) systemic anatomy

B) regional anatomy

C) surface anatomy

D) physiology

E) anatomic imaging

Answer: A

Section: 01.01 Anatomy

Topic: Scope of anatomy and physiology

Bloom's: 1. Remember

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

HAPS Learning Outcome: A05.1 Define the terms anatomy and physiology.

19) The study of the body's organization by areas (the approach used in most medical schools) is called  \_\_\_\_\_\_\_\_.

A) systemic anatomy

B) regional anatomy

C) surface anatomy

D) physiology

E) anatomic imaging

Answer: B

Section: 01.01 Anatomy

Topic: Scope of anatomy and physiology

Bloom's: 1. Remember

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

HAPS Learning Outcome: A05.1 Define the terms anatomy and physiology.

20) In which quadrant of the abdomen is most of the liver usually located?

A) Left lower quadrant

B) Right lower quadrant

C) Left upper quadrant

D) Right upper quadrant

Answer: D

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 3. Apply

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

HAPS Learning Outcome: A03.3 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

21) In which quadrant of the abdomen would the pain of acute appendicitis be felt?

A) Left lower quadrant

B) Right lower quadrant

C) Left upper quadrant

D) Right upper quadrant

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 3. Apply

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

HAPS Learning Outcome: A03.3 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

22) The thoracic cavity is separated from the abdominal cavity by the \_\_\_\_\_\_\_\_.

A) diaphragm

B) mediastinum

C) liver

D) lungs

E) pelvic muscles

Answer: A

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 1. Remember

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

HAPS Learning Outcome: A03.1 Describe the location of the body cavities and identify the major organs found in each cavity.

23) In which of these cavities would the urinary bladder and internal reproductive organs be found?

A) Thoracic

B) Pleural

C) Pelvic

D) Abdominal

E) Pericardial

Answer: C

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 1. Remember

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

HAPS Learning Outcome: A03.1 Describe the location of the body cavities and identify the major organs found in each cavity.

24) The pericardial cavity

A) contains the pericardial fluid.

B) surrounds the lungs.

C) is located between visceral peritoneum and parietal peritoneum.

D) is retroperitoneal.

E) All of the choices are correct.

Answer: A

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 2. Understand

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

HAPS Learning Outcome: A03.1 Describe the location of the body cavities and identify the major organs found in each cavity.

25) The kidneys, adrenal glands, pancreas, and urinary bladder are

A) connected to the body wall by mesenteries.

B) covered with visceral peritoneum.

C) found in the peritoneal cavity.

D) retroperitoneal.

E) surrounded by peritoneal fluid.

Answer: D

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 1. Remember

Learning Outcome: 01.06F. Describe the serous membranes, their locations, and their functions.

26) Which of the following cavities contains the liver, stomach, kidneys, and spleen?

A) Thoracic cavity

B) Pelvic cavity

C) Abdominal cavity

D) Pericardial cavity

E) Pleural cavity

Answer: C

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 1. Remember

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

HAPS Learning Outcome: A03.1 Describe the location of the body cavities and identify the major organs found in each cavity.

27) A cavity containing the lungs, but not the heart is the \_\_\_\_\_\_\_\_ cavity.

A) thoracic

B) pelvic

C) abdominal

D) pericardial

E) pleural

Answer: E

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 2. Understand

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

HAPS Learning Outcome: A03.1 Describe the location of the body cavities and identify the major organs found in each cavity.

28) A cavity enclosed by the bones of the pelvis and containing the urinary bladder is the  \_\_\_\_\_\_\_\_ cavity.

A) thoracic

B) pelvic

C) abdominal

D) pericardial

E) pleural

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 1. Remember

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

HAPS Learning Outcome: A03.1 Describe the location of the body cavities and identify the major organs found in each cavity.

29) A cavity containing the heart, but not the lungs is the \_\_\_\_\_\_\_\_ cavity.

A) thoracic

B) pelvic

C) abdominal

D) pericardial

E) pleural

Answer: D

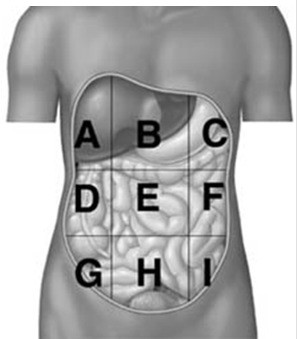
Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 2. Understand

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

HAPS Learning Outcome: A03.1 Describe the location of the body cavities and identify the major organs found in each cavity.



30) The region designated by the letter "E" is known as the \_\_\_\_\_\_\_\_ region.

A) umbilical

B) hypogastric

C) lumbar

D) hypochondriac

E) iliac

Answer: A

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 1. Remember

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

HAPS Learning Outcome: A03.3 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

31) The region designated by the letter "H" is known as the \_\_\_\_\_\_\_\_ region.

A) umbilical

B) hypogastric

C) lumbar

D) hypochondriac

E) iliac

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 1. Remember

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

HAPS Learning Outcome: A03.3 Describe the location of the four abdominopelvic quadrants and the nine abdominopelvic regions and list the major organs located in each.

32) A patient arrives at an emergency room with a traumatic pneumothorax after a car accident. In the course of the accident, the patient suffered a penetration wound, which allowed air to fill the space around one of her lungs causing it to collapse. Which serous membranes were likely damaged assuming that the lung itself was not punctured?

A) Visceral pleura

B) Visceral pericardium

C) Parietal pleura

D) Visceral peritoneum

E) Mesenteries

Answer: C

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 5. Evaluate

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

HAPS Learning Outcome: A03.1 Describe the location of the body cavities and identify the major organs found in each cavity.

33) If you make a Jell-O mold that has strawberries suspended in it and whipped cream on top, the strawberries are \_\_\_\_\_\_\_\_ while the whipped cream is \_\_\_\_\_\_\_\_.

A) superficial; deep

B) deep; superficial

C) anterior; deep

D) prone; deep

E) All of the choices are correct.

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Directional terms

Bloom's: 4. Analyze

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

HAPS Learning Outcome: A04.2 Describe the location of body structures, using appropriate directional terminology.

34) When you scratch a cat's back along its spine, which of the following terms would apply to the skin you are scratching?

A) Dorsal, superior, posterior, lateral

B) Ventral, inferior, anterior, medial, deep

C) Dorsal, superior, medial, superficial

D) Ventral, superior, medial, deep

E) Ventral, inferior, posterior, lateral

Answer: C

Section: 01.06 Terminology and the Body Plan

Topic: Directional terms

Bloom's: 4. Analyze

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

HAPS Learning Outcome: A04.2 Describe the location of body structures, using appropriate directional terminology.

35) Which of the following pairs of terms are synonymous in bipedal animals such as humans but not in quadrupeds (animals that walk on all four feet)?

A) Superior and anterior

B) Anterior and superficial

C) Proximal and superficial

D) Anterior and ventral

E) Dorsal and lateral

Answer: D

Section: 01.06 Terminology and the Body Plan

Topic: Directional terms

Bloom's: 1. Remember

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

HAPS Learning Outcome: A04.1 List and define the major directional terms used in anatomy.

36) Anatomical position refers to individuals that are

A) standing erect, upper limbs at their sides, and palms facing inward.

B) standing erect, upper limbs at their sides, and palms facing anterior.

C) laying supine, upper limbs at their sides, and palms facing inward.

D) laying supine, upper limbs at their sides, and palms facing anterior.

E) laying supine, upper limbs extended over their head.

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Anatomical position

Bloom's: 1. Remember

Learning Outcome: 01.06A. Describe a person in anatomical position.

HAPS Learning Outcome: A01.1 Describe a person in anatomical position.

37) Which of the sections below separates the body into superior and inferior parts?

A) Frontal section

B) Sagittal section

C) Longitudinal section

D) Transverse section

E) Oblique section

Answer: D

Section: 01.06 Terminology and the Body Plan

Topic: Body planes and sections

Bloom's: 1. Remember

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

HAPS Learning Outcome: A02.1 Identify the various planes in which a body might be dissected.; A02.2 Describe the appearance of a body presented along various planes.

38) Which of the sections below separates the body into dorsal and ventral parts?

A) Frontal section

B) Sagittal section

C) Longitudinal section

D) Transverse section

E) Oblique section

Answer: A

Section: 01.06 Terminology and the Body Plan

Topic: Body planes and sections

Bloom's: 1. Remember

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

HAPS Learning Outcome: A02.1 Identify the various planes in which a body might be dissected.; A02.2 Describe the appearance of a body presented along various planes.

39) Which of the sections below separates the body into right and left parts?

A) Frontal section

B) Median plane/(sagittal) section

C) Longitudinal section

D) Transverse section

E) Oblique section

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Body planes and sections

Bloom's: 1. Remember

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

HAPS Learning Outcome: A02.1 Identify the various planes in which a body might be dissected.; A02.2 Describe the appearance of a body presented along various planes.

40) Which of the following is a cut through the long axis of an organ?

A) Frontal section

B) Sagittal section

C) Longitudinal section

D) Transverse section

E) Oblique section

Answer: C

Section: 01.06 Terminology and the Body Plan

Topic: Body planes and sections

Bloom's: 1. Remember

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

HAPS Learning Outcome: A02.1 Identify the various planes in which a body might be dissected.; A02.2 Describe the appearance of a body presented along various planes.

41) Which of the following is a cut through an organ at right angles to the long axis?

A) Frontal section

B) Sagittal section

C) Longitudinal section

D) Transverse section

E) Oblique section

Answer: D

Section: 01.06 Terminology and the Body Plan

Topic: Body planes and sections

Bloom's: 1. Remember

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

HAPS Learning Outcome: A02.1 Identify the various planes in which a body might be dissected.; A02.2 Describe the appearance of a body presented along various planes.

42) When a person is in anatomical position, the wrist is \_\_\_\_\_\_\_\_ to the elbow.

A) proximal

B) dorsal

C) distal

D) ventral

E) superior

Answer: C

Section: 01.06 Terminology and the Body Plan

Topic: Directional terms

Bloom's: 2. Understand

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

HAPS Learning Outcome: A04.1 List and define the major directional terms used in anatomy.

43) From the anatomical position, the scapula (shoulder blade) is always \_\_\_\_\_\_\_\_ to the ribs.

A) dorsal

B) posterior

C) superficial

D) both dorsal and posterior

E) dorsal, posterior, and superficial

Answer: E

Section: 01.06 Terminology and the Body Plan

Topic: Directional terms

Bloom's: 2. Understand

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

HAPS Learning Outcome: A04.1 List and define the major directional terms used in anatomy.

44) The guillotine, a medieval instrument for beheading criminals, could be described as passing along a\_\_\_­\_\_\_\_\_\_ plane through the neck.

A) frontal

B) sagittal

C) transverse

D) longitudinal

E) superior

Answer: C

Section: 01.06 Terminology and the Body Plan

Topic: Body planes and sections

Bloom's: 3. Apply

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

HAPS Learning Outcome: A02.1 Identify the various planes in which a body might be dissected.; A02.2 Describe the appearance of a body presented along various planes.

45) A cut across the long axis of an organ at an angle other than a right angle is described as a(n) \_\_\_\_\_\_\_\_ section.

A) longitudinal

B) oblique

C) transverse

D) cross

E) horizontal

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Body planes and sections

Bloom's: 1. Remember

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

HAPS Learning Outcome: A02.1 Identify the various planes in which a body might be dissected.; A02.2 Describe the appearance of a body presented along various planes.

46) The fluid found between serous membrane layers

A) is blood.

B) reduces friction.

C) is secreted by digestive glands.

D) appears only after an injury.

E) Both "is blood" and "appears only after an injury" are correct.

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 2. Understand

Learning Outcome: 01.06F. Describe the serous membranes, their locations, and their functions.

47) The mesenteries

A) are double-layered membranes.

B) anchor some abdominal organs to the body wall.

C) are not connected to retroperitoneal organs.

D) are continuous with the parietal and visceral peritoneum.

E) All of the choices are correct.

Answer: E

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 2. Understand

Learning Outcome: 01.06F. Describe the serous membranes, their locations, and their functions.

48) Which of these statements about serous membranes is true?

A) Serous membranes line cavities that open to the outside of the body.

B) Visceral serous membranes are in contact with internal organs.

C) Retroperitoneal organs are surrounded by both parietal and visceral serous membranes.

D) Serous membranes surround the pleural and peritoneal cavities, but not the pericardial cavity.

E) All of the choices are correct.

Answer: B

Section: 01.06 Terminology and the Body Plan

Topic: Body cavities and regions

Bloom's: 2. Understand

Learning Outcome: 01.06F. Describe the serous membranes, their locations, and their functions.

49) In studying physiology, it is important to recognize that structures within the body are

A) static.

B) dynamic and mutable.

C) fixed.

D) unchanging.

Answer: B

Section: 01.02 Physiology

Topic: Scope of anatomy and physiology

Bloom's: 2. Understand

Learning Outcome: 01.02B. State two major goals of physiology.

50) Given these structures:

1) Cell

2) Organ

3) Chemical

4) Organ system

5) Organism

6) Tissue

Arrange the structures in the correct order from smallest to largest.

A) 3, 1, 6, 2, 4, 5

B) 1, 2, 3, 4, 5, 6

C) 2, 3, 1, 6, 4, 5

D) 4, 5, 3, 1, 6, 2

E) 4, 3, 1, 6, 2, 5

Answer: A

Section: 01.03 Structural and Functional Organization of the Human Body

Topic: Levels of organization

Bloom's: 2. Understand

Learning Outcome: 01.03A. Describe the six levels of organization of the body, and describe the major characteristics of each level.

HAPS Learning Outcome: A06.1 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

51) The basic structural and functional unit of an organism, such as plant or animal, is the \_\_\_\_\_\_\_\_.

A) organ

B) cell

C) organelle

D) organ system

E) tissue

Answer: B

Section: 01.03 Structural and Functional Organization of the Human Body

Topic: Levels of organization

Bloom's: 1. Remember

Learning Outcome: 01.03A. Describe the six levels of organization of the body, and describe the major characteristics of each level.

HAPS Learning Outcome: A06.1 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

52) The statement "a group of cells with similar structure and function plus the extracellular substances located between them" describes \_\_\_\_\_\_\_\_.

A) an organelle

B) an organism

C) an organ

D) an organ system

E) a tissue

Answer: E

Section: 01.03 Structural and Functional Organization of the Human Body

Topic: Levels of organization

Bloom's: 1. Remember

Learning Outcome: 01.03A. Describe the six levels of organization of the body, and describe the major characteristics of each level.

HAPS Learning Outcome: A06.1 Describe, in order from simplest to most complex, the major levels of organization in the human organism.

53) Which of the following is *NOT* the correct name of an organ system?

A) Integumentary

B) Lymphatic

C) Cardiovascular

D) Muscular

E) Hormonal

Answer: E

Section: 01.03 Structural and Functional Organization of the Human Body

Topic: Survey of body systems

Bloom's: 1. Remember

Learning Outcome: 01.03B List the eleven organ systems, identify their components, and describe the major functions of each system.

HAPS Learning Outcome: A07.1. List the organ systems of the human body and their major components.

54) Which of the following statements correctly describes the control center of a homeostatic mechanism?

A) The control center of a homeostatic mechanism detects changes in the external and internal environment.

B) The control center responds to environmental changes by always increasing the body variable.

C) The control center receives information from receptors and determines a response to a change in a body variable.

D) The control center is usually a muscle or gland that responds to a stimulus.

E) All of the choices are correct.

Answer: E

Section: 01.05 Homeostasis

Topic: Types of homeostatic mechanisms

Bloom's: 2. Understand

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

HAPS Learning Outcome: B02.1 List the components of a feedback loop and explain the function of each.

55) Which statement below describes a physiological process?

A) The skin is composed of two major tissue layers, the epidermis and dermis.

B) The thoracic cavity contains several organs including the heart and lungs.

C) The blood transports nutrients and oxygen to the cells of the body.

D) The pancreas is considered part of the digestive and endocrine systems.

E) A cell contains cytosol and organelles.

Answer: C

Section: 01.02 Physiology

Topic: Scope of anatomy and physiology

Bloom's: 2. Understand

Learning Outcome: 01.02A. Define physiology.

HAPS Learning Outcome: A05.1 Define the terms anatomy and physiology.

56) The spleen, thymus, and tonsils are all part of the \_\_\_\_\_\_\_\_ system.

A) digestive

B) endocrine

C) lymphatic

D) reproductive

E) respiratory

Answer: C

Section: 01.03 Structural and Functional Organization of the Human Body

Topic: Survey of body systems

Bloom's: 1. Remember

Learning Outcome: 01.03B List the eleven organ systems, identify their components, and describe the major functions of each system.

HAPS Learning Outcome: A07.1. List the organ systems of the human body and their major components.

57) The major goals of physiology include

A) understanding and predicting the body's response to stimuli.

B) understanding how the body maintains homeostasis.

C) knowing the location of the various organs of the body.

D) describing the various components of the eleven organ systems of the body.

E) Both "understanding and predicting the body's response to stimuli" and "understanding how the body maintains homeostasis" are correct.

Answer: E

Section: 01.02 Physiology

Topic: Scope of anatomy and physiology

Bloom's: 1. Remember

Learning Outcome: 01.02B. State two major goals of physiology.

HAPS Learning Outcome: A05.1 Define the terms anatomy and physiology.

58) Understanding the relationship between structure and function allows us to

A) investigate and understand disease.

B) pursue a career in the health sciences.

C) evaluate recommendations from our own medical professionals.

D) evaluate the validity of advertisements and reports concerning health.

E) All of the choices are correct.

Answer: E

Section: 01.01 Anatomy

Topic: Scope of anatomy and physiology

Bloom's: 1. Remember

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

HAPS Learning Outcome: A05.2 Give specific examples to show the interrelationship between anatomy and physiology.

59) If a person is standing erect, facing forward and has her hands on her hips, what movements must she make to assume the anatomical position?

A) She needs to lower her upper limbs to her side with her palms facing posteriorly.

B) She needs to raise her upper limbs so that they are at right angles to her body.

C) She needs to bend her knees slightly and raise her upper limbs so they are above her head.

D) She needs to lower her upper limbs to her side with her palms facing anteriorly.

E) She does not need to make any movements because she is already in the anatomical position.

Answer: D

Section: 01.06 Terminology and the Body Plan

Topic: Anatomical position

Bloom's: 3. Apply

Learning Outcome: 01.06A. Describe a person in anatomical position.

HAPS Learning Outcome: A01.1 Describe a person in anatomical position.