

# Patton: Anatomy and Physiology, 8<sup>th</sup> Edition

## Chapter 01-A: Organization of the Body

### Test Bank

#### TRUE/FALSE

1. A scientific theory is a fact.

ANS: F                      DIF: Application      REF: Page 4  
TOP: Science and Society

2. A theory that is supported by repeated observation and experimentation is called a hypothesis.

ANS: F                      DIF: Memorization                      REF: Page 4  
TOP: Science and Society

3. A theory may eventually become a law.

ANS: T                      DIF: Memorization                      REF: Page 4  
TOP: Science and Society

4. In humans, respiration occurs in the lungs.

ANS: T                      DIF: Application      REF: Page 6  
TOP: Characteristics of Life

5. *Anatomy* is the study of the functions of an organism and its parts, as opposed to the study of its structure.

ANS: F                      DIF: Memorization                      REF: Page 5  
TOP: Anatomy

6. Conductivity and responsiveness are highly developed in both muscle and nerve cells in living organisms.

ANS: T                      DIF: Application      REF: Page 6  
TOP: Characteristics of Life

7. The movement of digested nutrients through the wall of the digestive tube into the body fluids and to cells for use is called *absorption*.

ANS: T                      DIF: Memorization                      REF: Page 6  
TOP: Characteristics of Life

8. *Biology* is the study of life.
- ANS: T                      DIF: Memorization                      REF: Page 5  
TOP: Anatomy
9. Cell specialization is a necessary characteristic in order for the human body to function as it does.
- ANS: T                      DIF: Synthesis                      REF: Page 8                      TOP: Cellular Level
10. *Complementarity of structure* means the function of a part may or may not be related to its structure.
- ANS: F                      DIF: Memorization                      REF: Page 17  
TOP: Interaction of Structure and Function
11. Blood production is a function of the integumentary system.
- ANS: F                      DIF: Application                      REF: Page 6 (Table 1-2)  
TOP: Body Systems
12. The Golgi apparatus, endoplasmic reticulum, and mitochondria are examples of organelles.
- ANS: T                      DIF: Memorization                      REF: Page 8  
TOP: Organelle Level
13. An endomorph usually has a muscular physique.
- ANS: F                      DIF: Memorization                      REF: Page 18 (Box 1-1)  
TOP: Body Type and Disease
14. Certain patterns of body fat distribution in endomorphs are associated with greater risk for heart disease.
- ANS: T                      DIF: Memorization                      REF: Page 18 (Box 1-1)  
TOP: Body Type and Disease
15. Certain patterns of body fat distribution in endomorphs are associated with the development of diabetes.
- ANS: T                      DIF: Memorization                      REF: Page 18 (Box 1-1)

TOP: Body Type and Disease

16. When in anatomical position, the person is standing erect with arms at the sides and palms dorsal.

ANS: F                      DIF: Memorization                      REF: Page 10  
TOP: Anatomical Position

17. *Ipsilateral* simply means on the same side.

ANS: T                      DIF: Memorization                      REF: Page 10  
TOP: Anatomical Position

18. Bilateral symmetry is characteristic of external body organization, but not necessarily of internal organization.

ANS: T                      DIF: Application                      REF: Page 10  
TOP: Anatomical Position

19. The frontal plane divides the body into right and left sides.

ANS: F                      DIF: Memorization                      REF: Page 16  
TOP: Body Planes and Sections

20. *Visceral peritoneum* refers to the membrane that covers the organs within the abdominal cavity.

ANS: T                      DIF: Memorization                      REF: Page 10  
TOP: Body Cavities

21. The mediastinum is located in the ventral cavity.

ANS: T                      DIF: Memorization                      REF: Page 10  
TOP: Body Cavities

22. The dorsal cavity consists of the cranial and spinal cavities.

ANS: T                      DIF: Memorization                      REF: Page 10  
TOP: Body Cavities

23. The ventral cavity consists of the thoracic and abdominopelvic cavities.

ANS: T                      DIF: Memorization                      REF: Page 10  
TOP: Body Cavities

24. The head, neck, arms, and legs make up the axial skeleton.

ANS: F                    DIF: Memorization                    REF: Page 13  
TOP: Body Regions

25. The head can be subdivided into cranial and facial cavities.

ANS: F                    DIF: Memorization                    REF: Page 10  
TOP: Body Cavities

26. The term *crural* refers to the hip.

ANS: F                    DIF: Application    REF: Page 13 (Table 1-4)  
TOP: Body Regions

27. The umbilicus is the crossing point for the horizontal and vertical lines dividing the abdomen into quadrants.

ANS: T                    DIF: Memorization                    REF: Page 14  
TOP: Abdominal Quadrants

28. The bone of the upper arm is deep to the muscles that surround and cover it.

ANS: T                    DIF: Application    REF: Page 15                    TOP: Directional  
Terms

29. The kidneys are medial and anterior to the vertebrae.

ANS: F                    DIF: Application    REF: Page 15                    TOP: Directional  
Terms

30. The eyes, ears, and arms all show bilateral symmetry of the body.

ANS: T                    DIF: Application    REF: Page 10  
TOP: Anatomical Position

31. The study of immunology investigates the movement of the blood.

ANS: F                    DIF: Application    REF: Page 9 (Table 1-2)  
TOP: Transportation and Defense

32. In a functional homeostatic system, an increase of blood glucose will elicit physiological reactions that will decrease blood glucose.

ANS: T                    DIF: Application    REF: Page 19                    TOP: Homeostasis

33. The lymphatic system plays an important role in immunity.

ANS: T                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems

34. The human body maintains a static, rather than a dynamic, homeostasis.

ANS: F                    DIF: Application    REF: Page 19                    TOP: Homeostasis

35. Most individuals show almost total dominance by a single somatotype component.

ANS: F                    DIF: Application    REF: Page 18 (Box 1-1)  
TOP: Body Type and Disease

36. Positive feedback maintains homeostasis by resisting or reducing any deviation from normal values.

ANS: F                    DIF: Memorization                    REF: Page 22  
TOP: Positive Feedback Control Systems

37. Homeostatic mechanisms work on a negative feedback principle.

ANS: T                    DIF: Memorization                    REF: Page 20  
TOP: Basic Components of Control Mechanisms

38. The release of oxytocin to stimulate labor during the birth of a baby is an example of negative feedback.

ANS: F                    DIF: Application    REF: Page 22  
TOP: Positive Feedback Control Systems

39. The study of aging processes and other changes that occur as a person gets older is called *gerontology*.

ANS: T                    DIF: Memorization                    REF: Page 24  
TOP: Cycle of Life

40. *Pathophysiology* is the study of the body in the healthy condition.

ANS: F                    DIF: Memorization                    REF: Page 25  
TOP: Mechanisms of Disease

41. Bacteria generally have a well-defined nucleus.

ANS: F                    DIF: Memorization                    REF: Page 26  
TOP: Basic Mechanisms of Disease

42. Abnormal tissue growths are called *neoplasms*.
- ANS: T                      DIF: Memorization                      REF: Page 27  
TOP: Basic Mechanisms of Disease
43. *Physiology* deals with structure, whereas *anatomy* deals with function.
- ANS: F                      DIF: Memorization                      REF: Page 5  
TOP: Anatomy and Physiology
44. *Systemic anatomy* describes the study of the body parts with the aid of scanning electron microscopy.
- ANS: F                      DIF: Memorization                      REF: Page 5  
TOP: Anatomy and Physiology
45. The nose, pharynx, larynx, trachea, bronchi, and lungs are components of the circulatory system.
- ANS: F                      DIF: Memorization  
REF: Page 9 (Table 1-2)                      TOP: Body Systems
46. The nervous system is composed of brain, spinal cord, nerves, and sensory organs
- ANS: T                      DIF: Memorization                      REF: Page 11  
TOP: Body Systems
47. The pancreas contributes to more than one organ system.
- ANS: T                      DIF: Memorization                      REF: Page 11  
TOP: Body Systems
48. The endocrine system includes the pancreas, pituitary, adrenals, and other glands.
- ANS: T                      DIF: Memorization  
REF: Page 9 (Table 1-2)                      TOP: Body Systems
49. A negative feedback control system produces a change opposite of that which activated the system.
- ANS: T                      DIF: Memorization                      REF: Page 21  
TOP: Negative Feedback Control Systems
50. In the thermostatically regulated furnace example of negative feedback, the furnace functions as the sensor.

ANS: F                    DIF: Memorization                    REF: Page 26  
TOP: Basic Components of Control Mechanisms

51. Negative feedback systems are excitatory.

ANS: F                    DIF: Memorization                    REF: Page 21  
TOP: Negative Feedback Control Systems

52. The process of childbirth in which the baby's head causes increased stretch of the reproductive tract, information that feeds back to the brain triggering the release of oxytocin, is an example of negative feedback.

ANS: F                    DIF: Memorization                    REF: Page 22  
TOP: Positive Feedback Control Systems

53. The membrane lining the inside of the abdominopelvic cavity is the *visceral peritoneum*.

ANS: F                    DIF: Memorization                    REF: Page 10  
TOP: Body Cavities

54. The gallbladder resides in the left lower quadrant.

ANS: F                    DIF: Memorization  
REF: Page 14 (Figure 1-8)                    TOP: Abdominopelvic Quadrants

55. *Ventral* and *posterior* are synonymous terms.

ANS: F                    DIF: Memorization                    REF: Page 15  
TOP: Directional Terms

56. A coronal section would divide the body into equal right and left halves.

ANS: F                    DIF: Memorization                    REF: Page 16  
TOP: Body Planes and Sections

57. The cell theory provides the major single distinction between living and nonliving things.

ANS: F                    DIF: Memorization                    REF: Page 6  
TOP: Characteristics of Life

58. The tissues in the body can be divided into as few as four major types.

ANS: T                    DIF: Memorization                    REF: Page 8  
TOP: Tissue Level

59. With reference to the left elbow, the left shoulder would be the contralateral shoulder.

ANS: F                    DIF: Memorization                    REF: Page 10  
TOP: Anatomical Position

60. In anatomy, the thigh is considered part of the leg.

ANS: F                    DIF: Memorization                    REF: Page 14  
TOP: Body Regions

61. Because humans walk upright, *dorsal* can be substituted for *posterior*.

ANS: T                    DIF: Memorization                    REF: Page 15  
TOP: Directional Terms

62. Because humans walk upright, *superficial* can be substituted for *superior*.

ANS: F                    DIF: Memorization                    REF: Page 15  
TOP: Directional Terms

63. A fever indicates that the body has lost control of the body temperature set point.

ANS: F                    DIF: Application                    REF: Page 21 (Box 2-1)  
TOP: Changing the Set Point

64. Most of the feedback mechanisms in the body are positive feedback mechanisms.

ANS: F                    DIF: Memorization                    REF: Page 22  
TOP: Positive Feedback Control Systems

65. Atoms can be joined to form molecules and molecules can be joined to form macromolecules.

ANS: T                    DIF: Memorization                    REF: Page 7  
TOP: Levels of Organization

66. There can be as many as 10 trillion cells in the human body.

ANS: F                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization

67. *Secretion* refers to the removal of waste from the body.

ANS: F                    DIF: Memorization                    REF: Page 6  
TOP: Characteristics of Life

68. The process of absorption must precede the process of digestion.



ANS: F                    DIF: Memorization                    REF: Page 6  
TOP: Characteristics of Life

69. Although cardiac muscle is an example of a tissue, the heart is an example of an organ.

ANS: T                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization

70. Cytoplasm is considered to be at the chemical level of organization.

ANS: T                    DIF: Memorization                    REF: Page 7  
TOP: Chemical Level

71. A cell is characterized by a cell membrane and a single nucleus surrounded by cytoplasm containing organelles.

ANS: T                    DIF: Memorization                    REF: Page 8  
TOP: Cellular Level

72. The next most complex level of organization after the organ level is the organism level.

ANS: F                    DIF: Memorization                    REF: Page 8  
TOP: System Level

73. The *anatomical position* is the reference position for the directional terms of the body.

ANS: T                    DIF: Memorization                    REF: Page 10  
TOP: Anatomical Position

74. The diaphragm divides the abdominal cavity from the pelvic cavity.

ANS: F                    DIF: Memorization                    REF: Page 11  
TOP: Body Cavities

75. For convenience in locating abdominal organs, the abdomen is divided into six imaginary regions.

ANS: F                    DIF: Memorization                    REF: Page 14  
TOP: Abdominal Regions

76. *Superficial* and *inferior* are opposite directional terms in humans.

ANS: F                    DIF: Memorization                    REF: Page 15  
TOP: Directional Terms

77. *Proximal* and *distal* are opposite directional terms in humans.
- ANS: T                      DIF: Memorization                      REF: Page 15  
TOP: Directional Terms
78. A mid-coronal section would divide the body into bilaterally symmetrical halves.
- ANS: F                      DIF: Application      REF: Page 10|Page 16  
TOP: Anatomical Position/Body Planes and Sections
79. A mid-sagittal section would divide the body into bilaterally symmetrical halves.
- ANS: T                      DIF: Application      REF: Page 10|Page 16  
TOP: Anatomical Position/Body Planes and Sections
80. The concept of homeostasis refers to conditions that are set and stay the same all the time.
- ANS: F                      DIF: Memorization                      REF: Page 19  
TOP: Homeostasis
81. Eponyms are preferred in naming structures or processes in the body because they are easier to learn and give more information than the Latin-based names.
- ANS: F                      DIF: Memorization                      REF: Page 6  
TOP: Language of Science and Medicine
82. Controls in an experiment are used to limit the affect of outside influences on the result of the experiment.
- ANS: T                      DIF: Memorization                      REF: Page 4  
TOP: Science and Society
83. Metabolism refers only to those processes in the body that build larger molecules by way of joining two or more smaller molecules.
- ANS: F                      DIF: Memorization                      REF: Page 6  
TOP: Characteristics of Life
84. If two structures are on opposite sides of the body, they can be said to be contralateral to each other.
- ANS: T                      DIF: Memorization                      REF: Page 10  
TOP: Anatomical Position
85. Blood flows through the lumen of a blood vessel.

ANS: T                    DIF: Application    REF: Page 15  
TOP: Terms Related to Organs

86. The apical portion of an organ refers to the apex or widest part of that organ.

ANS: F                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs

87. The cortical portion of a structure is more superficial than the medullary portion of that structure.

ANS: T                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs

88. A feed-forward control system is another term for a positive control system.

ANS: F                    DIF: Memorization                    REF: Page 22  
TOP: Feed-Forward in Control Systems

89. Sagittal, coronal, and transverse are directional terms used to describe the location of structures relative to a reference point.

ANS: F                    DIF: Memorization                    REF: Page 10  
TOP: Anatomical Position

90. The structure of the mitochondria would be studied by someone interested in the gross anatomy of the body.

ANS: F                    DIF: Application    REF: Page 5                    TOP: Anatomy

91. A prion is a type of virus that has been linked to the development of mad cow disease.

ANS: F                    DIF: Memorization                    REF: Page 26  
TOP: Basic Mechanisms of Disease

92. The body has two main cavities: thoracic and abdominopelvic.

ANS: F                    DIF: Memorization                    REF: Page 10  
TOP: Body Cavities

93. Science can be described as a style of inquiry that attempts to understand nature in a rational, logical manner.

ANS: T                    DIF: Memorization                    REF: Page 4  
TOP: Science and Society

94. Good science is able to develop a set of unchanging facts.

ANS: F                      DIF: Memorization                      REF: Page 4  
TOP: Science and Society

95. Both anatomy and physiology have a list of standardized words that are reviewed every decade to allow changes in our knowledge and understanding of living systems.

ANS: F                      DIF: Memorization                      REF: Page 5|Page 6  
TOP: Language of Science and Medicine

96. Autopoiesis is a characteristic of a living thing.

ANS: T                      DIF: Memorization                      REF: Page 6  
TOP: Characteristics of Life

97. The term *somatotype* is used to describe a specific physique.

ANS: T                      DIF: Memorization                      REF: Page 18 (Box  
1-1)  
TOP: Body Type and Disease

98. Body types are grouped into three somatotypes: protomorph, ectomorph and endomorph.

ANS: F                      DIF: Memorization                      REF: Page 18 (Box  
1-1)  
TOP: Body Type and Disease

99. Among all body types, the “apple-shaped” individual tends to be more at risk for disease than the “pear-shaped” individual.

ANS: F                      DIF: Memorization                      REF: Page 18 (Box  
1-1)  
TOP: Body Type and Disease

100. If the right knee is injured, the ipsilateral knee can be used to compare the deformity or swelling and give an indication of the severity of the injury.

ANS: F                      DIF: Application                      REF: Page 10  
TOP: Anatomical Position

101. A transverse plane can also be called a frontal plane.

ANS: F                      DIF: Memorization                      REF: Page 16  
TOP: Body Planes and Sections

102. In describing an organ, the term *basal* is opposite the term *cortical*.

ANS: F                      DIF: Memorization                      REF: Page 15  
TOP: Terms Related to Organs

103. The French physiologist Claude Bernard introduced the term *homeostasis*, meaning a relatively constant internal environment.

ANS: F                      DIF: Memorization                      REF: Page 19  
TOP: Homeostasis

104. Intrinsic control mechanisms operate at the tissue and organ level.

ANS: T                      DIF: Memorization                      REF: Page 24  
TOP: Levels of Control

105. Extrinsic control means that the controlling mechanism is coming from outside the body.

ANS: F                      DIF: Memorization                      REF: Page 24  
TOP: Levels of Control

106. The term *atrophy* can be used to describe the wasting effects of advancing age.

ANS: T                      DIF: Memorization                      REF: Page 24  
TOP: Cycle of Life

**Patton: Anatomy and Physiology, 8<sup>th</sup> Edition****Chapter 01-B: Organization of the Body****Test Bank****MULTIPLE CHOICE**

1. Which of the following describes anatomy?
  - a. Using devices to investigate parameters such as heart rate and blood pressure
  - b. Investigating human structure via dissections and other methods
  - c. Studying the unusual manner in which an organism responds to painful stimuli
  - d. Examining the physiology of life

ANS: B                      DIF: Memorization                      REF: Page 5  
TOP: Anatomy and Physiology

2. *Systemic anatomy* is a term that refers to:
  - a. physiological investigation at a microscopic level.
  - b. anatomical investigation that begins in the head and neck and concludes at the feet.
  - c. anatomical investigation that uses an approach of studying the body by systems—groups of organs having a common function.
  - d. anatomical investigation at the molecular level.

ANS: C                      DIF: Memorization                      REF: Page 5  
TOP: Anatomy and Physiology

3. Physiology can be subdivided according to the \_\_\_\_\_ studied.
  - a. type of organism
  - b. organizational level
  - c. systemic function
  - d. All of the above are correct.

ANS: D                      DIF: Memorization                      REF: Page 5  
TOP: Physiology

4. Physiology:
  - a. recognizes the unchanging (as opposed to the dynamic) nature of things.
  - b. investigates the body's structure.
  - c. is concerned with organisms and does not deal with different levels of organization such as cells and systems.
  - d. is the science that examines the function of living organisms and their parts.

ANS: D                      DIF: Memorization                      REF: Page 5  
TOP: Physiology

5. Withdrawing from a painful stimulus is an example of:
- excretion.
  - growth.
  - responsiveness.
  - secretion.

ANS: C                    DIF: Application    REF: Page 6  
TOP: Characteristics of Life

6. *Metabolism* refers to:
- the chemical basis of life.
  - the sum of all the physical and chemical reactions occurring in the body.
  - an organization of similar cells specialized to perform a certain function.
  - a subdivision of physiology.

ANS: B                    DIF: Application    REF: Page 6  
TOP: Characteristics of Life

7. A somatotype characterized by having a muscular physique is called a(n):
- endomorph.
  - mesomorph.
  - ectomorph.
  - None of the above are correct.

ANS: B                    DIF: Application    REF: Page 18 (Box 1-1)  
TOP: Body Type and Disease

8. *Homeostasis* can best be described as:
- a constant state maintained by living and nonliving organisms.
  - a state of relative constancy.
  - adaptation to the external environment.
  - changes in body temperature.

ANS: B                    DIF: Application    REF: Page 18 (Box 1-1)  
TOP: Homeostasis

9. From smallest to largest, the levels of organization of the body are:
- organism, chemical, tissue, cellular, organ, system, organelle.
  - chemical, microscopic, cellular, tissue, organ, system, organism.
  - organism, system, organ, tissue, cellular, organelle, chemical.
  - chemical, organelle, cellular, tissue, organ, system, organism.

ANS: D                    DIF: Memorization                    REF: Page 8|Page 9  
TOP: Levels of Organization

10. The smallest living units of structure and function in the body are:
- molecules.
  - cells.
  - organelles.
  - atoms.

ANS: B                      DIF: Memorization                      REF: Page 8  
TOP: Levels of Organization

11. An organization of many similar cells that are specialized to perform a certain function is called a(n):
- tissue.
  - organism.
  - system.
  - organ.

ANS: A                      DIF: Memorization                      REF: Page 8  
TOP: Tissue Level

12. An organ is one organizational step lower than a(n):
- system.
  - cell.
  - organelle.
  - tissue.

ANS: A                      DIF: Memorization                      REF: Page 8  
TOP: Organ Level

13. Which of the following is not one of the basic components in a feedback control loop?
- Effector mechanism
  - Transmitter
  - Sensor
  - Integrating center

ANS: B                      DIF: Memorization                      REF: Page 20  
TOP: Basic Components of Control Mechanisms

14. All of the following systems and their organs participate in the actions of transport and defense within the human body except the \_\_\_\_\_ system.
- urinary
  - cardiovascular
  - lymphatic
  - respiratory

ANS: A                      DIF: Memorization  
REF: Page 9 (Table 1-2)                      TOP: Transportation and Defense



15. The body's thermostat is located in the:
- heart.
  - cerebellum.
  - pituitary.
  - hypothalamus.

ANS: D                      DIF: Memorization  
TOP: Basic Components of Control Mechanisms

REF: Page 20

16. The reproductive system includes all of the following except the:
- testes.
  - ovaries.
  - ureter.
  - penis.

ANS: C                      DIF: Memorization  
REF: Page 9 (Table 1-2)                      TOP: Body Systems

17. The contraction of the uterus during the birth of a baby is an example of \_\_\_\_\_ feedback.
- negative
  - positive
  - inhibitory
  - deviating

ANS: B                      DIF: Memorization  
TOP: Positive Feedback Control Systems

REF: Page 23 (Box 1-3)

18. Negative feedback mechanisms:
- minimize changes in blood glucose levels.
  - maintain homeostasis.
  - are responsible for an increased rate of sweating when air temperature is higher than body temperature.
  - all of the above are correct.

ANS: D                      DIF: Memorization  
TOP: Negative Feedback Control Systems

REF: Page 21

19. The lungs are located in the:
- thoracic cavity.
  - mediastinum.
  - abdominal cavity.
  - cranial cavity.

ANS: A                      DIF: Memorization

REF: Page 11 (Table 1-3)

TOP: Body Cavities

20. The mediastinum contains all the following except the:
- trachea.
  - venae cavae.
  - right lung.
  - esophagus.

ANS: C DIF: Memorization

REF: Page 11 (Table 1-3)

TOP: Body Cavities

21. The gallbladder lies in the:
- abdominal cavity.
  - pelvic cavity.
  - dorsal cavity.
  - mediastinum.

ANS: A DIF: Memorization

REF: Page 11 (Table 1-3)

TOP: Body Cavities

22. The number of abdominal regions is:
- three.
  - five.
  - seven.
  - nine.

ANS: D DIF: Memorization

TOP: Abdominal Regions

REF: Page 14

23. The abdominal region in which the urinary bladder is found is the:
- hypogastric.
  - epigastric.
  - right lumbar.
  - left iliac.

ANS: A DIF: Memorization

TOP: Abdominal Regions

REF: Page 14

24. A surgeon removing a gallbladder should know to find it in the \_\_\_\_\_ region.
- right lumbar
  - right hypochondriac
  - hypogastric
  - umbilical

ANS: B DIF: Memorization

TOP: Abdominal Regions

REF: Page 14

25. The abdominal region in which the appendix is found is the:
- hypogastric.
  - right iliac.
  - right lumbar.
  - right hypochondriac.

ANS: A                      DIF: Memorization  
TOP: Abdominal Regions

REF: Page 14

26. *Popliteal* refers to the:
- calf.
  - ankle.
  - cheek.
  - area behind the knee.

ANS: D                      DIF: Memorization  
REF: Page 13 (Table 1-4)

TOP: Descriptive Terms for Body Regions

27. A plane through the body that divides the body into right and left sides is called:
- sagittal.
  - frontal.
  - coronal.
  - transverse.

ANS: A                      DIF: Memorization  
TOP: Body Planes and Sections

REF: Page 16

28. The abdominal quadrants are located with what structure as their midpoint?
- Umbilicus
  - Pubic bone
  - Xiphoid process
  - Iliac crest

ANS: A                      DIF: Memorization  
TOP: Abdominopelvic Quadrants

REF: Page 14

29. Humans have similar right and left sides of the body, at least superficially. This is an example of:
- anatomical position.
  - anterior symmetry.
  - ipsilateral position.
  - bilateral symmetry.

ANS: D                      DIF: Memorization  
TOP: Anatomical Position

REF: Page 10

30. Two major cavities of the human body are:
- ventral/dorsal.
  - inferior/superior.
  - visceral/parietal.
  - axial/appendicular.

ANS: A                      DIF: Memorization

REF: Page 10| Page

11

TOP: Body Cavities

31. The dorsal cavity contains all of the following except the:
- brain.
  - spinal column.
  - spinal cord.
  - thyroid gland.

ANS: D                      DIF: Memorization

REF: Page 10|Page

11

TOP: Body Cavities

32. A plane through the body that divides the body into anterior and posterior portions is:
- sagittal.
  - median.
  - coronal.
  - transverse.

ANS: C                      DIF: Memorization

REF: Page 16

TOP: Body Planes and Sections

33. The plane that divides the body into upper and lower parts is the \_\_\_\_\_ plane.
- sagittal
  - frontal
  - transverse
  - superficial

ANS: C                      DIF: Memorization

REF: Page 16

TOP: Body Planes and Sections

34. A somatotype characterized by a thin, fragile physique is a(n):
- ectomorph.
  - mesomorph.
  - endomorph.

ANS: A                      DIF: Memorization

REF: Page 18 (Box

1-1)

TOP: Body Type and Disease

35. *Pathogenesis* may be defined as:
- a specific disease.
  - a group of diseases.
  - the course of disease development.
  - a subgroup of viruses.

ANS: C  
1-4)

DIF: Memorization

REF: Page 25 (Box

TOP: Disease Terminology

36. The abdominopelvic cavity contains all of the following except the:
- kidneys.
  - gallbladder.
  - right lung.
  - urinary bladder.

ANS: C

DIF: Memorization

REF: Page 11 (Table 1-3)

TOP: Body Cavities

37. Intracellular parasites that consist of DNA or RNA surrounded by a protein coat and sometimes by a lipoprotein envelope are called:
- viruses.
  - bacteria.
  - fungi.
  - protozoa.

ANS: A

DIF: Memorization

REF: Page 26

TOP: Basic Mechanisms of Disease

38. The term that literally means self-immunity is:
- autoimmunity.
  - homoimmunity.
  - passive immunity.
  - active immunity.

ANS: A

DIF: Memorization

REF: Page 27

TOP: Basic Mechanisms of Disease

39. The study of the aging process is called:
- neonatology.
  - gerontology.
  - dermatology.
  - podiatry.

ANS: B                    DIF: Memorization                    REF: Page 26  
TOP: Cycle of Life: Life Span Considerations

40. *Epidemiology* is the study of the \_\_\_\_\_ of diseases in human populations.
- occurrence
  - distribution
  - transmission
  - All of the above are correct.

ANS: D                    DIF: Memorization                    REF: Page 25 (Box 1-4)  
TOP: Disease Terminology

41. Which of the following may put one at risk for developing a given disease?
- Environment
  - Stress
  - Lifestyle
  - All of the above

ANS: D                    DIF: Memorization                    REF: Page 27  
TOP: Mechanisms of Disease

42. Which of the following is not one of the characteristics of life?
- Digestion
  - Balance
  - Conductivity
  - Circulation
  - Reproduction

ANS: B                    DIF: Memorization                    REF: Page 6  
TOP: Characteristics of Life

43. An idea that is supported by repeated experiments and observation is called a:
- fact.
  - theory.
  - concept.
  - hypothesis.

ANS: B                    DIF: Memorization                    REF: Page 4  
TOP: Science and Society

44. *Molecules* are:
- atoms combined to form larger chemical aggregates.
  - electrons orbiting nuclei.
  - a complex of electrons arranged in concentric shells.
  - composed of cellular organelles.

ANS: A                    DIF: Memorization                    REF: Page 7  
TOP: Chemical Level: Basis for Life

45. Mitochondria, Golgi apparatus, and endoplasmic reticulum are examples of:
- molecules.
  - cytoplasm.
  - organelles.
  - plasma membranes.

ANS: C                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization

46. When many similar cells specialize to perform a certain function, it is referred to as a(n):
- tissue.
  - organelle.
  - organ system complex.
  - organism.

ANS: A                    DIF: Memorization                    REF: Page 8  
TOP: Tissue Level

47. Several kinds of tissues working together is termed a(n):
- plasma membrane.
  - organ.
  - organism.
  - organ system.

ANS: B                    DIF: Memorization                    REF: Page 8  
TOP: Organ Level

48. Blood production is a function of which system?
- Reproductive
  - Respiratory
  - Skeletal
  - Lymphatic

ANS: C                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Support and Movement

49. Negative feedback control systems:
- oppose a change.
  - accelerate a change.
  - have no effect on the deviation from set point.
  - establish a new set point.

ANS: A                    DIF: Memorization  
TOP: Negative Feedback Control Systems

REF: Page 21

50. Positive feedback control systems:
- have no effect on the deviation from set point.
  - accelerate a change.
  - ignore a change.
  - do not exist in human systems.

ANS: B                    DIF: Memorization  
TOP: Positive Feedback Control Systems

REF: Page 22

51. The dorsal body cavity contains the:
- brain and spinal cord.
  - heart and lungs.
  - reproductive organs.
  - digestive organs.

ANS: A                    DIF: Memorization  
11  
TOP: Body Cavities

REF: Page 10|Page

52. The ventral body cavity contains the:
- thoracic and abdominopelvic cavities.
  - heart and lungs only.
  - digestive and reproductive organs.
  - brain and spinal cord.

ANS: A                    DIF: Memorization  
11  
TOP: Body Cavities

REF: Page 10|Page

53. The axial portion of the body consists of the:
- arms, neck, and legs.
  - neck, torso, and arms.
  - torso, arms, legs, and head.
  - head, neck, and torso.

ANS: D                    DIF: Memorization  
TOP: Body Regions

REF: Page 13

54. The abdominopelvic cavity contains all of the following except the:
- stomach.
  - pancreas.
  - heart.
  - reproductive organs.



ANS: C                    DIF: Memorization  
REF: Page 11 (Table 1-3)                    TOP: Body Cavities

55. Visceral peritoneum would cover which of the following organs?
- Heart
  - Intestines
  - Lungs
  - Spinal cord

ANS: B                    DIF: Memorization                    REF: Page 11  
TOP: Body Cavities

56. A sagittal section divides the body into \_\_\_\_\_ portions.
- upper and lower
  - right and left
  - front and back
  - proximal and distal

ANS: B                    DIF: Memorization                    REF: Page 16  
TOP: Body Planes and Sections

57. A frontal section divides the body into \_\_\_\_\_ portions.
- upper and lower
  - right and left
  - front and back
  - cortex and medullary

ANS: C                    DIF: Memorization                    REF: Page 16  
TOP: Body Planes and Sections

58. *Axilla* is a term referring to which body region?
- Anterior elbow
  - Armpit
  - Posterior knee
  - Groin

ANS: B                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Descriptive Terms for Body Regions

59. The \_\_\_\_\_ tissue is not a major tissue of the body.
- cutaneous
  - epithelial
  - connective
  - nervous

ANS: A                    DIF: Memorization                    REF: Page 8  
TOP: Tissue Level

60. “Apple-shaped” or “pear-shaped” usually describes subtypes of what major body type?
- Mesomorph
  - Ectomorph
  - Endomorph
  - Polymorph

ANS: C                    DIF: Memorization                    REF: Page 18 (Box 1-1)  
TOP: Body Type and Disease

61. Shivering to try to raise your body temperature back to normal would be an example of:
- the body trying to maintain homeostasis.
  - a positive feedback mechanism.
  - a negative feedback mechanism.
  - both A and C.

ANS: D                    DIF: Synthesis                    REF: Page 18 (Box 1-1)  
TOP: Homeostasis/Negative Feedback Control Systems

62. Eponyms are scientific terms that:
- sound alike but are spelled differently.
  - can have more than one meaning.
  - are based on a person’s name.
  - are none of the above.

ANS: C                    DIF: Memorization                    REF: Page 5  
TOP: The Language of Science and Medicine

63. An organ is one organizational step higher than a(n):
- system.
  - cell.
  - organelle.
  - tissue.

ANS: D                    DIF: Memorization                    REF: Page 8  
TOP: Organ Level

64. Which of the following does not describe anatomical position?
- Head pointing forward
  - Body standing erect
  - Arms extended from the shoulders, palms up
  - All of the above describe the body in the anatomical position.

ANS: C                    DIF: Memorization                    REF: Page 10  
TOP: Anatomical Position

65. Someone studying gross anatomy would not study which of the following?
- The location of the heart and chambers of the heart
  - Muscles of the arms and legs
  - The nucleus of the cell
  - All of the above would be studied.

ANS: C                    DIF: Memorization                    REF: Page 5  
TOP: Anatomy

66. The parietal pleura covers the:
- lungs.
  - heart.
  - walls of the thoracic cavity.
  - Both A and B are correct.

ANS: C                    DIF: Memorization                    REF: Page 11  
TOP: Body Cavities

67. The hollow part of an organ or body structure is called the \_\_\_\_\_ of the organ.
- cortical part
  - lumen
  - medullary part
  - apical part

ANS: B                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs

68. The narrowest part of an organ or body structure is called the \_\_\_\_\_ of the organ.
- cortical part
  - lumen
  - medullary part
  - apical part

ANS: D                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs

69. Which of the following is not a directional term of the body?
- Apical
  - Proximal
  - Superficial
  - Deep

ANS: D                    DIF: Memorization                    REF: Page 15

## TOP: Terms Related to Organs

70. Which of the following is a protein substance with no DNA or RNA and is thought to be the cause of mad cow disease?
- Virus
  - Bacteria
  - Prion
  - Protozoan

ANS: C                      DIF: Memorization                      REF: Page 26  
TOP: Pathogenic Organisms

71. Of the pathogenic organisms, which of the following are the most complex?
- Viruses
  - Tapeworms
  - Bacteria
  - Protozoa

ANS: B                      DIF: Memorization                      REF: Page 26|Page 27  
TOP: Pathogenic Organisms

72. If the secretion of oxytocin during childbirth operated as a negative feedback control loop, what effect would it have on uterine contractions?
- Oxytocin would stimulate stronger uterine contractions.
  - Oxytocin would inhibit uterine contractions.
  - There would be no changes in the strength of the uterine contractions.
  - Uterine contractions would initially be weak and then gain strength after the release of the hormone.

ANS: B                      DIF: Application                      REF: Page 22  
TOP: Positive Feedback Control Systems

73. What is the anatomical direction term that means *nearer the surface*?
- Deep
  - Distal
  - Proximal
  - Superficial

ANS: D                      DIF: Application                      REF: Page 15                      TOP: Directional Terms

74. An x-ray technician has been asked to make x-ray films of the liver. Which of the abdominopelvic regions must be included?
- Right hypochondriac, epigastric, and left hypochondriac
  - Right hypochondriac, right lumbar, and right iliac

- c. Right iliac, hypogastric, and left iliac
- d. Right lumbar, umbilical, and left lumbar

ANS: A                    DIF: Application    REF: Page 14  
TOP: Abdominal Regions

75. As a nurse, you are assisting a physician with the examination of a patient. The physician asks you to tell the patient, who is lying on the examination table, to assume the anatomical position. How would you instruct the patient to assume this position?
- a. Have the patient stand up and place his arms at his sides, palms facing forward, with hands and feet facing forward.
  - b. Have the patient stand up and place his arms at his sides, palms facing posteriorly, with hands and feet facing forward.
  - c. Have the patient stand up and place his arms behind him, palms facing to the side, with feet facing forward.
  - d. Have the patient stand up and place his arms at his sides, palms facing down, with feet facing forward.

ANS: A                    DIF: Application    REF: Page 10  
TOP: Anatomical Position

76. Of the 11 major body systems, which is the least involved in maintaining homeostasis?
- a. Circulatory
  - b. Endocrine
  - c. Lymphatic
  - d. Reproductive

ANS: D                    DIF: Application    REF: Page 8                    TOP: System Level

77. During a routine physical examination, a patient with an endomorphic somatotype with a large waistline and overall “apple shape” should be advised that such a distribution of fat may lead to what conditions?
- a. Heart disease, stroke, high blood pressure, and colitis
  - b. Heart disease, stroke, high blood pressure, and diabetes
  - c. Heart disease, stroke, low blood pressure, and colitis
  - d. Prostate cancer, low blood pressure, and diabetes

ANS: B                    DIF: Application    REF: Page 18 (Box 1-1)  
TOP: Body Type and Disease

78. If your reference point is “farthest from the trunk of the body” versus “nearest to the trunk of the body,” where does the knee lie in relation to the ankle?
- a. Distal
  - b. Proximal
  - c. Superficial
  - d. Superior

ANS: B                    DIF: Application    REF: Page 15            TOP: Directional Terms

79. The study of microscopic anatomy might include:
- systemic anatomy.
  - cytology.
  - histology.
  - both B and C.

ANS: D                    DIF: Memorization                    REF: Page 5  
TOP: Anatomy and Physiology

80. The structure that is called the “power house” of the cell is the:
- cytoplasm.
  - endoplasmic reticulum.
  - mitochondria.
  - Golgi apparatus.

ANS: C                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization

81. How many main tissue types are found in the human body?
- 4
  - 8
  - 11
  - 6

ANS: A                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization

82. The mediastinum is located in the \_\_\_\_\_ cavity.
- dorsal
  - abdominal
  - ventral
  - Both B and C are correct.

ANS: C                    DIF: Application    REF: Page 10            TOP: Body Cavities

83. Another term for *posterior* is:
- ventral.
  - dorsal.
  - inferior.
  - proximal.

ANS: B                    DIF: Memorization                    REF: Page 15

## TOP: Directional Terms

84. The term most nearly opposite *cortical* would be:
- peripheral.
  - apical.
  - medullary.
  - basal.

ANS: C                      DIF: Memorization  
TOP: Terms Related to Organs

REF: Page 15

85. Intrinsic control:
- usually involves the endocrine or nervous system.
  - operates at the cellular level.
  - is sometimes called *autoregulation*.
  - operates at the system or organism level.

ANS: C                      DIF: Memorization  
TOP: Levels of Control

REF: Page 24

**MATCHING**

*Match each organ to its corresponding system.*

- Respiratory
  - Digestive
  - Urinary
  - Reproductive
  - Endocrine
  - Cardiovascular
  - Integumentary
  - Muscular
  - Skeletal
  - Nervous
- 
- tendons
  - pituitary gland
  - skin
  - capillaries
  - ligaments
  - spinal cord

7. bronchial tree
8. testes and ovaries
9. large and small intestines
10. ureters
  1. ANS: H                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
  2. ANS: E                    DIF: Memorization                    REF: Page 9  
TOP: Body Systems
  3. ANS: G                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
  4. ANS: F                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
  5. ANS: I                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
  6. ANS: J                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
  7. ANS: A                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
  8. ANS: D                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
  9. ANS: B                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
  10. ANS: C                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems

*Match each term to its associated region.*

- a. Abdominal
- b. Brachial
- c. Cervical
- d. Coxal
- e. Cutaneous
- f. Digital



- g. Femoral
- h. Lumbar

- 11. thigh
- 12. arm
- 13. anterior torso
- 14. lower back between ribs and pelvis
- 15. fingers and toes
- 16. hip
- 17. skin
- 18. neck

- 11. ANS: G                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Body Regions
- 12. ANS: B                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Body Regions
- 13. ANS: A                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Body Regions
- 14. ANS: H                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Body Regions
- 15. ANS: F                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Body Regions
- 16. ANS: D                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Body Regions
- 17. ANS: E                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Body Regions
- 18. ANS: C                    DIF: Memorization  
REF: Page 13 (Table 1-4)                    TOP: Body Regions

*Match each term to its correct corresponding statement.*

- a. superior

- b. inferior
- c. anterior
- d. posterior
- e. medial
- f. lateral
- g. proximal
- h. distal
- i. superficial

19. The great toe is \_\_\_\_\_ to the little toe.
20. The skin is \_\_\_\_\_ to the muscles beneath it.
21. The vertebrae are located on the \_\_\_\_\_ aspect of the body.
22. The hand is \_\_\_\_\_ to the shoulder.
23. The abdomen is \_\_\_\_\_ to the head.
24. The lungs are \_\_\_\_\_ to the intestines.
25. The nose is located on the \_\_\_\_\_ surface of the head.
26. The knee is \_\_\_\_\_ to the ankle.
27. The ear is on the \_\_\_\_\_ aspect of the head.

19. ANS: E                      DIF: Memorization                      REF: Page 15  
TOP: Directional Terms

20. ANS: I                      DIF: Memorization                      REF: Page 15  
TOP: Directional Terms

21. ANS: D                      DIF: Memorization                      REF: Page 15  
TOP: Directional Terms

22. ANS: H                      DIF: Memorization                      REF: Page 15  
TOP: Directional Terms

23. ANS: B                      DIF: Memorization                      REF: Page 15  
TOP: Directional Terms

24. ANS: A                      DIF: Memorization                      REF: Page 15  
TOP: Directional Terms

25. ANS: C                    DIF: Memorization                    REF: Page 15  
TOP: Directional Terms
26. ANS: G                    DIF: Memorization                    REF: Page 15  
TOP: Directional Terms
27. ANS: F                    DIF: Memorization                    REF: Page 15  
TOP: Directional Terms

*Match each set of functions with its corresponding system or systems.*

- a. Reproduction and development
  - b. Processing, regulation, maintenance
  - c. Outer protection
  - d. Support and movement
  - e. Communication, control, integration
  - f. Transportation and defense
28. nervous system
29. muscular system and skeletal system
30. circulatory system and lymphatic system
31. respiratory system, digestive system and endocrine system
32. reproductive system
33. integumentary system
28. ANS: E                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
29. ANS: D                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
30. ANS: F                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
31. ANS: B                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
32. ANS: A                    DIF: Memorization  
REF: Page 9 (Table 1-2)                    TOP: Body Systems
33. ANS: C                    DIF: Memorization

REF: Page 9 (Table 1-2)

TOP: Body Systems

*Match each characteristic of life with the correct descriptive phrase.*

- a. Conductivity
  - b. Excretion
  - c. Growth
  - d. Circulation
  - e. Respiration
  - f. Responsiveness
  - g. Digestion
  - h. Absorption
  - i. Secretion
  - j. Reproduction
34. movement of digested nutrients through the wall of the digestive tract into body fluids for transport to the cell
  35. permits an organism to sense, monitor, and respond to changes in the external environment
  36. production and release of specialized substances to support diverse body functions
  37. responsiveness and this characteristic are highly developed in nerve cells
  38. movement of body fluids and other substances from one part of the body to another
  39. removal of waste produced by many body functions
  40. comes about as a result of a normal increase in size or number of cells
  41. exchange of gases between the organism and the environment
  42. formation of new individuals
  43. process by which complex food substances are broken down into simple substances that can be absorbed by the cells
34. ANS: H                      DIF: Memorization  
REF: Page 6 (Table 1-2)                      TOP: Characteristics of Life
  35. ANS: F                      DIF: Memorization  
REF: Page 6 (Table 1-2)                      TOP: Characteristics of Life
  36. ANS: I                      DIF: Memorization  
REF: Page 6 (Table 1-2)                      TOP: Characteristics of Life

37. ANS: A                   DIF: Memorization  
REF: Page 6 (Table 1-2)                   TOP: Characteristics of Life
38. ANS: D                   DIF: Memorization  
REF: Page 6 (Table 1-2)                   TOP: Characteristics of Life
39. ANS: B                   DIF: Memorization  
REF: Page 6 (Table 1-2)                   TOP: Characteristics of Life
40. ANS: C                   DIF: Memorization  
REF: Page 6 (Table 1-2)                   TOP: Characteristics of Life
41. ANS: E                   DIF: Memorization  
REF: Page 6 (Table 1-2)                   TOP: Characteristics of Life
42. ANS: J                   DIF: Memorization  
REF: Page 6 (Table 1-2)                   TOP: Characteristics of Life
43. ANS: G                   DIF: Memorization  
REF: Page 6 (Table 1-2)                   TOP: Characteristics of Life

*Match each term with its corresponding definition or explanation.*

- a. Prion
  - b. Tumor
  - c. Fungi
  - d. Gene mutation
  - e. Bacteria
  - f. Virus
  - g. Protozoa
44. an intracellular parasite that consists of an RNA or DNA core surrounded by a protein coat
45. a type of protein that converts normal protein in the nervous system into abnormal proteins that cause loss of function
46. a tiny, primitive cell that lacks a nucleus and can cause infection
47. an abnormal growth or neoplasm
48. altered DNA that causes abnormal proteins to be made that do not perform their intended function

49. a one-celled organism whose DNA is organized into a nucleus that can parasitize human tissue
50. simple organisms that are similar to plants but lack chlorophyll, which allows plants to make their own food; because these organisms cannot make their own food, they parasitize human tissue
44. ANS: F                      DIF: Memorization                      REF: Page 26  
TOP: Basic Mechanisms of Disease
45. ANS: A                      DIF: Memorization                      REF: Page 26  
TOP: Basic Mechanisms of Disease
46. ANS: E                      DIF: Memorization                      REF: Page 26  
TOP: Basic Mechanisms of Disease
47. ANS: B                      DIF: Memorization                      REF: Page 27  
TOP: Basic Mechanisms of Disease
48. ANS: D                      DIF: Memorization                      REF: Page 27  
TOP: Basic Mechanisms of Disease
49. ANS: G                      DIF: Memorization                      REF: Page 26  
TOP: Basic Mechanisms of Disease
50. ANS: C                      DIF: Memorization                      REF: Page 26  
TOP: Basic Mechanisms of Disease

*Match each term related to an organ to its definition or explanation.*

- a. Medullary
  - b. Basal
  - c. Apical
  - d. Cortical
  - e. Lumen
51. base or widest part of the organ
52. outer region or layer of an organ
53. hollow part of an organ or tube of the body
54. inner region of an organ
55. narrow part or point of an organ

51. ANS: B                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs
52. ANS: D                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs
53. ANS: E                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs
54. ANS: A                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs
55. ANS: C                    DIF: Memorization                    REF: Page 15  
TOP: Terms Related to Organs

*Match each level of organization with its description.*

- a. Chemical
  - b. Organelle
  - c. Cellular
  - d. Tissue
  - e. Organ
  - f. System
  - g. Organism
56. Highest level of organization
57. Includes mitochondria
58. Composed of the smallest structure that possesses the basic characteristics of living matter
59. Level at which the tissues work together to perform a specific function
60. Composed of macromolecules
61. Cells working together to perform a specific function
62. Level at which a group of organs work together to perform specific complex functions
56. ANS: G                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization
57. ANS: B                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization

58. ANS: C                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization
59. ANS: E                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization
60. ANS: A                    DIF: Memorization                    REF: Page 7  
TOP: Levels of Organization
61. ANS: D                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization
62. ANS: F                    DIF: Memorization                    REF: Page 8  
TOP: Levels of Organization

**OTHER**

1. In simple terms, what are the characteristics of life?

ANS:

Answers will vary.

DIF: Application    REF: Page 6                    TOP: Characteristics of Life

2. Discuss the principle of complementarity of structure and function.

ANS:

Answers will vary.

DIF: Application    REF: Page 17                    TOP: Interaction of Structure and Function

3. Diagram a homeostatic control mechanism, including the three basic components.

ANS:

Answers will vary.

DIF: Synthesis        REF: Page 21|Page 24

TOP: Homeostatic Control Mechanisms

4. How does childbirth demonstrate positive feedback?

ANS:

Answers will vary.

DIF: Synthesis        REF: Page 23 (Box 1-3)

TOP: Positive Feedback Control Systems



5. Give an example of how categories of risk factors or predisposing conditions may overlap.

ANS:

Answers will vary.

DIF: Synthesis REF: Page 27 TOP: Basic Mechanisms of Disease

6. Explain one way in which culture has affected science. Explain one way in which science has affected culture.

ANS:

Answers will vary.

DIF: Application REF: Page 4 TOP: Science and Society

7. Explain the feed-forward control system and give an example of one in the body.

ANS:

Answers will vary.

DIF: Application REF: Page 22 TOP: Feed-Forward in Control Systems

8. Describe the levels of organization from chemical to system.

ANS:

Answers will vary

DIF: Memorization REF: Page 7|Page 8

TOP: Levels of Organization

9. Describe anatomical position. Give examples of structures that are ipsilateral and contralateral to each other.

ANS:

Answers will vary.

DIF: Application REF: Page 10 TOP: Anatomical Position

10. List the directional terms and use them to describe the relationship between two structures in the body.

ANS:

Answers will vary.

DIF: Application REF: Page 15 TOP: Directional Terms

**ESSAY**

1. Give an example of a system, either living or nonliving, that is designed to maintain a relatively constant condition by using a negative feedback mechanism. Explain briefly how the system works to accomplish this.

ANS:

Answers will vary.

DIF: Synthesis REF: Page 20  
TOP: Basic Components of Control Mechanisms