MULTIPLE CHOICE

1. The word derived from two word parts that mean “cutting apart” is
   a. physiology
   b. homeostasis
   c. anatomy
   d. dissection
   ANS: C  DIF: Memorization  REF: p. 3
   OBJ: 1  TOP: Introduction

2. The study of how the body functions is called
   a. physiology
   b. homeostasis
   c. anatomy
   d. dissection
   ANS: A  DIF: Memorization  REF: p. 3
   OBJ: 1  TOP: Introduction

3. The correct sequence of the level of organization is
   a. cellular, chemical, tissue, organ
   b. chemical, cellular, tissue, organ
   c. chemical, cellular, organ, tissue
   d. chemical, tissue, cellular, organ
   ANS: B  DIF: Memorization  REF: p. 5
   OBJ: 3  TOP: Structural levels of organization

4. The smallest living unit of structure is considered to be at the
   a. chemical level
   b. cellular level
   c. organ level
   d. tissue level
   ANS: B  DIF: Memorization  REF: p. 6
   OBJ: 3  TOP: Structural levels of organization

5. The reference position for all body directional terms is the
   a. anatomical position
   b. prone position
   c. supine position
   d. sitting position
   ANS: A  DIF: Memorization  REF: pp. 6-7
   OBJ: 4  TOP: Anatomical position

6. The relationship between the knee and the ankle can be described as
   a. the knee is inferior to the ankle
   b. the knee is distal to the ankle
   c. the knee is proximal to the ankle
   d. both a and b above
   ANS: C  DIF: Application  REF: pp. 7-8
   OBJ: 5  TOP: Anatomical directions

7. The relationship between the heart and the lungs can be described as
   a. the heart is distal to the lungs
   b. the heart is medial to the lungs
   c. the heart is lateral to the lungs
   d. both a and c above
   ANS: B  DIF: Application  REF: p. 7
   OBJ: 5  TOP: Anatomical directions

8. The term most opposite proximal is
   a. medial
   b. superior
   c. anterior
   d. distal
   ANS: D  DIF: Memorization  REF: p. 7
   OBJ: 5  TOP: Anatomical directions
9. Because humans walk in an upright position, the two terms that can be used interchangeably are
   a. posterior and ventral
   b. posterior and inferior
   c. posterior and superficial
   d. posterior and dorsal
   ANS: D DIF: Memorization REF: p. 7
   OBJ: 5 TOP: Anatomical directions

10. The term most opposite medial is
    a. dorsal
    b. lateral
    c. superficial
    d. none of the above
    ANS: B DIF: Memorization REF: p. 7
    OBJ: 5 TOP: Anatomical directions

11. The relationship between the skin and the muscles can be described as
    a. the skin is superficial to the muscle
    b. the muscle is superficial to the skin
    c. the muscle is deep to the skin
    d. both a and c above
    ANS: D DIF: Memorization REF: p. 7
    OBJ: 3 TOP: Anatomical directions

12. A cut dividing the body into anterior and posterior portions is called a
    a. sagittal section
    b. frontal section
    c. transverse section
    d. none of the above
    ANS: B DIF: Memorization REF: p. 9
    OBJ: 5 TOP: Planes or body sections

13. A cut dividing the body into upper and lower portions is called a
    a. sagittal section
    b. frontal section
    c. transverse section
    d. coronal section
    ANS: C DIF: Memorization REF: p. 9
    OBJ: 5 TOP: Planes or body sections

14. A cut dividing the body into right and left portions is called a
    a. sagittal section
    b. frontal section
    c. transverse section
    d. coronal section
    ANS: A DIF: Memorization REF: pp. 8-9
    OBJ: 5 TOP: Planes or body sections

15. The mediastinum is part of the
    a. dorsal cavity
    b. ventral cavity
    c. abdominal cavity
    d. both b and c above
    ANS: B DIF: Memorization REF: p. 9
    OBJ: 6 TOP: Body cavities

16. The two major cavities of the body are the
    a. dorsal and ventral
    b. thoracic and abdominal
    c. pleural and mediastinum
    d. none of the above
    ANS: A DIF: Memorization REF: p. 9
    OBJ: 6 TOP: Body cavities

17. The diaphragm divides the
    a. dorsal from the ventral cavity
    b. abdominal from the pelvic cavity
    c. thoracic from the abdominal cavity
    d. pleural from the mediastinum
    ANS: C DIF: Memorization REF: p. 9
    OBJ: 6 TOP: Body cavities
18. The upper abdominopelvic regions include the
   a. right and left hypochondriac and umbilical
   b. right and left lumbar and umbilical
   c. right and left iliac and epigastric
   d. right and left hypochondriac and epigastric
   ANS: D   DIF: Memorization   REF: p. 10
   OBJ: 7   TOP: Body cavities

19. The middle abdominopelvic regions include the
   a. right and left lumbar and umbilical
   b. right and left lumbar and epigastric
   c. right and left iliac and hypogastric
   d. right and left iliac and umbilical
   ANS: A   DIF: Memorization   REF: p. 10
   OBJ: 7   TOP: Body cavities

20. The lower abdominopelvic regions include the
   a. right and left iliac and umbilical
   b. right and left iliac and epigastric
   c. right and left lumbar and hypogastric
   d. right and left iliac and hypogastric
   ANS: D   DIF: Memorization   REF: p. 10
   OBJ: 7   TOP: Body cavities

21. The brain is in the
   a. ventral cavity
   b. cranial cavity
   c. mediastinum
   d. none of the above
   ANS: B   DIF: Memorization   REF: p. 10
   OBJ: 6   TOP: Body cavities

22. The spinal cavity is part of the
   a. dorsal cavity
   b. ventral cavity
   c. cranial cavity
   d. none of the above
   ANS: A   DIF: Memorization   REF: p. 9
   OBJ: 6   TOP: Body cavities

23. The left upper quadrant of the abdominopelvic cavity includes all of the
   a. left lumbar region
   b. left iliac region
   c. left hypochondriac region
   d. left inguinal region
   ANS: C   DIF: Application   REF: p. 10   OBJ: 7
   TOP: Body cavities

24. Using the maintaining of a constant temperature in a building as an example of a feedback loop, the thermometer would be an example of a(n)
   a. sensor
   b. control center
   c. effector
   d. positive feedback loop
   ANS: A   DIF: Memorization   REF: p. 14
   OBJ: 9   TOP: The balance of body functions

25. Using the maintaining of a constant temperature in a building as an example of a feedback loop, the furnace would be an example of a(n)
   a. sensor
   b. control center
   c. effector
   d. positive feedback loop
   ANS: C   DIF: Memorization   REF: p. 14
   OBJ: 9   TOP: The balance of body functions

26. Using the maintaining of a constant temperature in a building as an example of a feedback loop, the thermostat would be an example of a(n)
   a. sensor
   b. control center
   c. effector
   d. positive feedback loop
   ANS: B   DIF: Memorization   REF: p. 14
   OBJ: 9   TOP: The balance of body functions
27. The abdominopelvic region that can be found in each of the four quadrants is the
   a. umbilical
   b. hypogastric
   c. epigastric
   d. left iliac
   ANS: A  DIF: Application  REF: p. 10  OBJ: 7
   TOP: Body cavities

28. The lower right abdominopelvic quadrant includes all of the
   a. right hypochondriac region
   b. right lumbar region
   c. right iliac region
   d. right epigastric region
   ANS: C  DIF: Application  REF: p. 10  OBJ: 7
   TOP: Body cavities

29. An example of a positive feedback loop would be
   a. maintaining proper body temperature
   b. forming a blood clot
   c. uterine contractions during childbirth
   d. both b and c above
   ANS: D  DIF: Application  REF: p. 15  OBJ: 9
   TOP: The balance of body functions

30. An example of a negative feedback loop would be
   a. maintaining proper body temperature
   b. forming a blood clot
   c. uterine contractions during childbirth
   d. both b and c above
   ANS: A  DIF: Application  REF: p. 15  OBJ: 9
   TOP: The balance of body functions

31. A midsagittal section through the head would divide
   a. the forehead from the chin
   b. the nose from the back of the head
   c. the right eye from the left eye
   d. none of the above
   ANS: C  DIF: Application  REF: pp. 8-9  OBJ: 5
   TOP: Planes or body sections

32. A transverse section through the head would divide
   a. the forehead from the chin
   b. the nose from the back of the head
   c. the right eye from the left eye
   d. none of the above
   ANS: A  DIF: Application  REF: pp. 8-9  OBJ: 5
   TOP: Planes or body sections

33. A frontal section through the head would divide
   a. the forehead from the chin
   b. the nose from the back of the head
   c. the right eye from the left eye
   d. none of the above
   ANS: B  DIF: Application  REF: pp. 8-9  OBJ: 5
   TOP: Planes or body sections

34. If this kind of section were made through the center of the head, both the right and left eyes would be on the same section.
   a. Coronal section
   b. Midsagittal section
   c. Transverse section
   d. Both a and c above
   ANS: D  DIF: Application  REF: pp. 8-9  OBJ: 5
   TOP: Planes or body sections

35. The relationship between an organ and organ system is similar to the relationship between a cell and
   a. an organism
   b. the cellular level of organization
   c. a tissue
   d. none of the above
   ANS: C  DIF: Synthesis  REF: p. 6  OBJ: 3
   TOP: Structural levels of organization
36. The heart is an example of this level or organization.
   a. Tissue
   b. Organ
   c. Organ system
   d. Organism

   ANS: B
   OBJ: 3
   TOP: Structural levels of organization
   REF: pp. 4-5

37. Blood vessels are examples of this level or organization.
   a. Organ system
   b. Tissue
   c. Organ
   d. Cellular

   ANS: C
   OBJ: 3
   TOP: Structural levels of organization
   REF: pp. 4-5

38. On a directional rosette, a letter L would stand for
   a. “left” if it is opposite the letter R
   b. “lateral” if it is opposite the letter D
   c. “lateral” if it is opposite the letter A
   d. “lower” if it is opposite the letter U

   ANS: A
   OBJ: 5
   TOP: Anatomical directions
   REF: pp. 7-8

39. Which of the following terms do not refer to a part of the head region?
   a. Olecranal
   b. Zygomatic
   c. Frontal
   d. All of the above terms refer to parts of the head

   ANS: A
   OBJ: 8
   TOP: Body regions
   REF: p. 13 (Table 1-2)

40. Which of the following is not controlled by a negative feedback loop?
   a. Body temperature
   b. Blood oxygen concentration
   c. Fluid levels of the body
   d. Blood clot formation

   ANS: D
   OBJ: 9
   TOP: The balance of body functions
   REF: p. 15

41. The organ level of organization contains all of these lower levels.
   a. The cellular and tissue levels only
   b. The chemical and tissue levels only
   c. The chemical, cellular, and tissue levels only
   d. The chemical, cellular, tissue, and system levels

   ANS: C
   OBJ: 3
   TOP: Structural levels of organization
   REF: pp. 5-6

42. This structure physically separates the pelvic cavity from the abdominal cavity.
   a. Mediastinum
   b. Diaphragm
   c. Mesenteries
   d. None of the above

   ANS: D
   OBJ: 6
   TOP: Body cavities
   REF: p. 9

43. The lungs are located in the
   a. thoracic cavity
   b. mediastinum
   c. dorsal cavity
   d. both b and c above

   ANS: A
   OBJ: 6
   TOP: Body cavities
   REF: p. 10

44. A scientific experiment testing a new drug used two groups, one getting the drug and one getting the sugar pill. The group getting the sugar pill is the
   a. test group
   b. hypothesis group
   c. control group
   d. observational group

   ANS: C
   OBJ: 2
   TOP: Scientific method
   REF: p. 4
45. A scientific experiment testing a new drug used two groups, one getting the drug and one getting a sugar pill. If the two groups had the same result, it would indicate
   a. the drug was safe and effective
   b. the drug was ineffective because it did no better than the sugar pill
   c. the experiment was a failure and no information could be gained
   d. both b and c
   ANS: B  DIF: Application  REF: p. 4  OBJ: 2
   TOP: Scientific method

46. A scientific experiment testing a new drug used two groups, one getting the drug and one getting a sugar pill. If the group getting the drug did much better than the group with the sugar pill:
   a. it would indicate that the drug was more effective than the sugar pill
   b. a theory would be formed
   c. the control group would be shown to have improved because of the drug
   d. all of the above
   ANS: A  DIF: Application  REF: p. 4  OBJ: 2
   TOP: Scientific method

47. In the metric system
   a. a meter is longer than a yard
   b. a centimeter is longer than an inch
   c. a nanometer is longer than a micrometer
   d. all of the above
   ANS: A  DIF: Memorization  REF: p. 4
   OBJ: 2  TOP: Metric System

48. If a person lost a little more than 3 pounds on a diet, they would have lost about
   a. 500 grams
   b. 1000 grams
   c. 1500 grams
   d. 2000 grams
   ANS: C  DIF: Application  REF: p. 4  OBJ: 2
   TOP: Metric System

49. The word *supine* describes
   a. the body lying face downward
   b. an anatomical direction
   c. the reference position of the body
   d. the body lying face upward
   ANS: D  DIF: Memorization  REF: p. 7
   OBJ: 4  TOP: Anatomical position

50. Which process is used as the principal technique used to isolate and study the structural components or parts of the human body?
   a. Imaging
   b. Dissection
   c. X-rays
   d. Resection
   ANS: B  DIF: Memorization  REF: p. 3
   OBJ: 1  TOP: Introduction

**TRUE/FALSE**

1. The word *dissection* is derived from two word parts that mean “cutting apart.”
   ANS: F  DIF: Memorization  REF: p. 3
   OBJ: 1  TOP: Introduction

2. The cell is the smallest living structural unit of the body.
   ANS: T  DIF: Memorization  REF: p. 6
   OBJ: 3  TOP: Structural levels of organization

3. An organ is defined as a group of several types of cells working together to perform a specific function.
   ANS: F  DIF: Memorization  REF: p. 6
   OBJ: 3  TOP: Structural levels of organization

4. The reference position for the directional terms of the body is called the anatomical position.
   ANS: T  DIF: Memorization  REF: p. 7
   OBJ: 4  TOP: Anatomical position

5. The prone position is a position in which the body is lying face down.
   ANS: T  DIF: Memorization  REF: p. 7
   OBJ: 4  TOP: Anatomical position

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6. The prone position is a position in which the body is lying face up.
ANS: F DIF: Memorization REF: p. 7
OBJ: 4 TOP: Anatomical position

7. The supine position is a position in which the body is lying face up.
ANS: T DIF: Memorization REF: p. 7
OBJ: 4 TOP: Anatomical position

8. Superior means toward the head.
ANS: T DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions

9. Because humans walk upright, superior and superficial mean the same thing.
ANS: F DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions

10. Anterior and proximal are opposite terms.
ANS: F DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions

11. Medial and lateral are opposite terms.
ANS: T DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions

12. Proximal and distal are opposite terms.
ANS: T DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions

13. Because humans walk upright, inferior and deep mean the same thing.
ANS: F DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions

14. Because humans walk upright, ventral and anterior mean the same thing.
ANS: T DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions

15. Because humans walk upright, dorsal and posterior mean the same thing.
ANS: T DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions

16. The hand is distal to the elbow.
ANS: T DIF: Application REF: p. 7 OBJ: 5
TOP: Anatomical directions

17. The foot is proximal to the knee.
ANS: F DIF: Application REF: p. 7 OBJ: 5
TOP: Anatomical directions

18. The nose is superior to the mouth.
ANS: T DIF: Application REF: p. 7 OBJ: 5
TOP: Anatomical directions

19. The mouth is inferior to the chin.
ANS: F DIF: Application REF: p. 7 OBJ: 5
TOP: Anatomical directions

20. The big toe is lateral to the little toe.
ANS: F DIF: Application REF: p. 7 OBJ: 5
TOP: Anatomical directions

21. The ears are lateral to the nose.
ANS: T DIF: Application REF: p. 7 OBJ: 5
TOP: Anatomical directions

22. The heart is medial to the lungs.
ANS: T DIF: Application REF: p. 7 OBJ: 5
TOP: Anatomical directions
23. The skin is superficial to the ribs.
ANS: T DIF: Application REF: p. 7 OBJ: 5 TOP: Anatomical directions

24. The lungs are deep to the ribs.
ANS: T DIF: Application REF: p. 7 OBJ: 5 TOP: Anatomical directions

25. The bones of the arm are superficial to the muscles of the arm.
ANS: F DIF: Application REF: p. 7 OBJ: 5 TOP: Anatomical directions

26. The nose is on the anterior side of the body.
ANS: T DIF: Application REF: p. 7 OBJ: 5 TOP: Anatomical directions

27. The navel is on the dorsal side of the body.
ANS: F DIF: Application REF: p. 7 OBJ: 5 TOP: Anatomical directions

28. The vertebrae are on the dorsal side of the body.
ANS: T DIF: Application REF: p. 7 OBJ: 5 TOP: Anatomical directions

29. A sagittal section divides the body into upper and lower parts.
ANS: F DIF: Memorization REF: pp. 8-9 OBJ: 5 TOP: Planes or body sections

30. A sagittal section divides the body into right and left parts.
ANS: T DIF: Memorization REF: pp. 8-9 OBJ: 5 TOP: Planes or body sections

31. A frontal section divides the body into front and back parts.
ANS: T DIF: Memorization REF: p. 9 OBJ: 5 TOP: Planes or body sections

32. A transverse section divides the body into upper and lower parts.
ANS: T DIF: Memorization REF: p. 9 OBJ: 5 TOP: Planes or body sections

33. The two major cavities of the body are the abdominal and thoracic cavities.
ANS: F DIF: Memorization REF: p. 9 OBJ: 6 TOP: Body cavities

34. The two major cavities of the body are the dorsal and ventral cavities.
ANS: T DIF: Memorization REF: p. 9 OBJ: 6 TOP: Body cavities

35. The diaphragm divides the thoracic cavity and the abdominal cavity.
ANS: T DIF: Memorization REF: p. 9 OBJ: 6 TOP: Body cavities

36. The mediastinum is in both the ventral and thoracic cavities.
ANS: T DIF: Memorization REF: p. 9 OBJ: 6 TOP: Body cavities

37. The pleural cavity is in both the thoracic and dorsal cavities.
ANS: F DIF: Memorization REF: p. 9 OBJ: 6 TOP: Body cavities

38. The brain and spinal cord are in the dorsal cavity.
ANS: T DIF: Memorization REF: p. 9 OBJ: 6 TOP: Body cavities

39. The cranial cavity contains the brain and spinal cord.
ANS: F DIF: Memorization REF: p. 9 OBJ: 6 TOP: Body cavities
40. The upper abdominopelvic area consists of the right and left hypogastric and the epigastric regions.

ANS: F  DIF: Memorization  REF: p. 10
OBJ: 7  TOP: Body cavities

41. The lower abdominopelvic area contains the left iliac region.

ANS: T  DIF: Memorization  REF: p. 10
OBJ: 7  TOP: Body cavities

42. The middle abdominopelvic area contains the umbilical region.

ANS: T  DIF: Memorization  REF: p. 10
OBJ: 7  TOP: Body cavities

43. The epigastric, umbilical, and left lumbar regions are all in the middle abdominopelvic area.

ANS: F  DIF: Memorization  REF: p. 10
OBJ: 7  TOP: Body cavities

44. Homeostasis refers to the relatively constant internal environment the body tries to maintain.

ANS: T  DIF: Memorization  REF: p. 13
OBJ: 9  TOP: The balance of body functions

45. A negative feedback loop is one way the body tries to maintain homeostasis.

ANS: T  DIF: Memorization  REF: p. 15
OBJ: 9  TOP: The balance of body functions

46. The sensor in a feedback loop compares the actual condition to the “normal” condition the body tries to maintain.

ANS: F  DIF: Memorization  REF: pp. 14-15
OBJ: 9  TOP: The balance of body functions

47. The effector in a negative feedback loop does something to move the regulated condition back to “normal.”

ANS: T  DIF: Memorization  REF: pp. 14-15
OBJ: 9  TOP: The balance of body functions

48. The sensor in a negative feedback loop detects a change in the regulated condition.

ANS: T  DIF: Memorization  REF: pp. 14-15
OBJ: 9  TOP: The balance of body functions

49. In the negative feedback loop, the effector is the link between the sensor and the control center.

ANS: F  DIF: Memorization  REF: pp. 14-15
OBJ: 9  TOP: The balance of body functions

50. The formation of a blood clot is an example of a negative feedback loop.

ANS: F  DIF: Memorization  REF: p. 15
OBJ: 9  TOP: The balance of body functions

51. The control of the volume of body fluid is an example of a negative feedback loop.

ANS: T  DIF: Memorization  REF: p. 15
OBJ: 9  TOP: The balance of body functions

52. The regulation of blood pH is an example of a positive feedback loop.

ANS: F  DIF: Memorization  REF: p. 15
OBJ: 9  TOP: The balance of body functions

53. The contraction of the uterus during childbirth is an example of a positive feedback loop.

ANS: T  DIF: Memorization  REF: p. 15
OBJ: 9  TOP: The balance of body functions

54. The arms and legs are part of the axial body portion.

ANS: F  DIF: Memorization  REF: p. 12
OBJ: 8  TOP: Body regions

55. The head and trunk are part of the axial body portion.

ANS: T  DIF: Memorization  REF: p. 12
OBJ: 8  TOP: Body regions

56. The arms and legs are part of the appendicular body portion.

ANS: T  DIF: Memorization  REF: p. 12
OBJ: 8  TOP: Body regions
57. Feedback loops continue to improve throughout life, reaching their peak in late adulthood.

ANS: F  DIF: Memorization  REF: p. 16
OBJ: 9  TOP: The balance of body functions

58. The word *organism* can be used to describe a living thing.

ANS: T  DIF: Memorization  REF: p. 3
OBJ: 3  TOP: Structural levels of organization

59. A body in a supine position has its dorsal side to the ground.

ANS: T  DIF: Application  REF: p. 7  OBJ: 4
TOP: Anatomical position | Anatomical directions

60. A body in a prone position has its dorsal side to the ground.

ANS: F  DIF: Application  REF: p. 7  OBJ: 4
TOP: Anatomical position | Anatomical directions

61. On the compass rosettes in a figure, the letter P opposite the letter D would stand for the word *proximal*.

ANS: T  DIF: Memorization  REF: p. 8
OBJ: 5  TOP: Anatomical directions

62. The thoracic cavity is divided into two parts, the mediastinum and the dorsal cavity.

ANS: F  DIF: Memorization  REF: p. 10
OBJ: 6  TOP: Body cavities

63. The midsagittal and transverse sections, which divide the abdomen into quadrants, intersect at the base of the mediastinum.

ANS: F  DIF: Memorization  REF: p. 9
OBJ: 5  TOP: Body cavities

64. The diaphragm divides the axial from the appendicular region of the body.

ANS: F  DIF: Memorization  REF: p. 9
OBJ: 8  TOP: Body regions

65. The word *leg* refers only to the part of the body between the knee and the ankle.

ANS: T  DIF: Memorization  REF: p. 12
OBJ: 8  TOP: Body regions

66. Women can have one more body function regulated by a positive feedback loop than men can.

ANS: T  DIF: Application  REF: p. 15  OBJ: 9
TOP: The balance of body functions

67. Exercise helps to maintain homeostasis.

ANS: F  DIF: Memorization  REF: p. 16
OBJ: 9  TOP: Health and Well-Being: Exercise Physiology

68. The cell is the simplest level of organization in a living thing.

ANS: F  DIF: Memorization  REF: p. 6
OBJ: 3  TOP: Structural levels of organization

69. When reading a compass rosette in a figure, the letter L can mean either left or lateral.

ANS: T  DIF: Memorization  REF: p. 8
OBJ: 5  TOP: Anatomical directions

70. When reading a compass rosette in a figure, the letter P opposite the letter D stands for posterior.

ANS: F  DIF: Memorization  REF: p. 8
OBJ: 5  TOP: Anatomical directions

71. The dorsal cavity is a made up of a single cavity containing the brain and spinal cord.

ANS: F  DIF: Memorization  REF: p. 9
OBJ: 6  TOP: Body cavities

72. The abdominopelvic region is divided into four quadrants, the left and right lumbar regions on the upper part and the left and right iliac regions on the lower part.

ANS: F  DIF: Memorization  REF: p. 9
OBJ: 7  TOP: Body regions
73. The cells in the body live in a water environment that contains dissolved salts and other substances.

ANS: T DIF: Memorization REF: p. 13
OBJ: 9 TOP: Balance of body functions

74. The terms ophthalmic and orbital both refer to the eye area.

ANS: T DIF: Memorization REF: p. 13 (Table 1-2)
OBJ: 6 TOP: Descriptive terms for body regions

75. In the scientific method, a hypothesis is based on observation.

ANS: T DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

76. The single method used for all scientific investigation is called the scientific method.

ANS: F DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

77. An accepted hypothesis must be retested numerous times to become a theory.

ANS: T DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

78. If the effects of a drug are being tested by a scientific experiment, two groups would be used: a group that gets the drug and a group that gets an inactive substance. The group that gets the inactive substance is called the control group.

ANS: T DIF: Application REF: p. 4 OBJ: 2
TOP: Scientific method

79. The term **atrophy** describes a body structure that is at the peak of its efficiency.

ANS: F DIF: Memorization REF: p. 12
OBJ: 8 TOP: Body regions

80. The term **dystrophy** describes a degenerative process on a body structure due to lack of use.

ANS: F DIF: Memorization REF: p. 12
OBJ: 8 TOP: Body regions

81. The study of the structure of an organism and the relationships of its parts is often defined as **physiology**.

ANS: F DIF: Memorization REF: p. 3
OBJ: 1 TOP: Introduction

MATCHING

Match each of the following terms with its correct definition.

a. Anterior
b. Lateral
c. Superior
d. Medial
e. Proximal
f. Superficial
g. Posterior

1. Toward the head, upper or above
2. Toward the midline of the body
3. In humans, this term means the same as ventral
4. Nearest to the point of origin
5. Toward the back of the body
6. Nearest the surface of the body
7. Toward the side of the body

1. ANS: C DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions
2. ANS: D DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions
3. ANS: A DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions
4. ANS: E DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions
5. ANS: G DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions
OBJ: 5 TOP: Anatomical directions
7. ANS: B DIF: Memorization REF: p. 7
OBJ: 5 TOP: Anatomical directions
Match the body region with the correct body part.

a. Skull
d. Mouth
e. Brachial
f. Wrist
g. Cephalic
h. Antebrachial
i. Antecubital
j. Cervical
k. Axillary
l. Femoral
m. Lumbar
n. Popliteal
o. Tarsal
p. Plantar

8. Arm
9. Head
10. Cranial
11. Oral
12. Inguinal
13. Thoracic
14. Carpal
15. Sole of the foot
16. Neck
17. Thigh
18. Armpit
19. Depressed area in the front of the elbow
20. Lower back between ribs and pelvis
21. Ankle
22. Forearm
23. Area behind the knee

Match the term with the correct definition or explanation.

a. Hypothesis
c. Theory
d. Experimentation
e. Control group
f. Test group

24. A hypothesis that has been supported by repeated testing and has gained a high level of confidence
25. A systematic approach to discovery
26. A group that does not get what is being tested
27. A reasonable guess based on previous informal observations
28. A process used to test a hypothesis

29. A group that receives what is being tested

24. ANS: C DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

25. ANS: B DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

26. ANS: E DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

27. ANS: A DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

28. ANS: D DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

29. ANS: F DIF: Memorization REF: p. 4
OBJ: 2 TOP: Scientific method

ESSAY

1. Explain the concept of homeostasis. Why is this so important to the survival of the body?

ANS: (Answers may vary)
DIF: Application REF: pp. 12-14 OBJ: 9
TOP: The balance of body functions

2. Explain a positive feedback loop. Give an example of a positive feedback loop in the body.

ANS: (Answers may vary)
DIF: Application REF: p. 15 OBJ: 9
TOP: The balance of body functions

3. Explain a negative feedback loop. How does a negative feedback loop assist in maintaining homeostasis?

ANS: (Answers may vary)
DIF: Synthesis REF: p. 15 OBJ: 9
TOP: The balance of body functions

4. List and briefly explain the levels of organization in the body.

ANS: (Answers may vary)
DIF: Memorization REF: pp. 4-6 OBJ: 3
TOP: Structural levels of organization

5. List and briefly explain the process of the scientific method.

ANS: (Answers may vary)
DIF: Memorization REF: p. 4 OBJ: 2
TOP: Scientific method

6. Develop and explain an experiment that tests the hypothesis that people with high levels of vitamin C in their diets have fewer colds than people with low levels of vitamin C in their diets.

ANS: (Answers may vary)
DIF: Memorization REF: p. 4 OBJ: 2
TOP: Scientific method

7. Explain the difference between a hypothesis and a theory.

ANS: (Answers may vary)
DIF: Application REF: p. 4 OBJ: 2 TOP: Scientific method

8. Explain how the control group is used to determine the success of the test group and the experiment.

ANS: (Answers may vary)
DIF: Application REF: p. 4 OBJ: 2 TOP: Scientific method
9. What is the relationship between a meter and a yard, an inch and a centimeter, and a pound and a gram?

ANS: (Answers may vary)

DIF: Application  REF:  p. 4  OBJ: 2  TOP: Metric System

10. Describe anatomical position. Explain the terms supine and prone.

ANS: (Answers may vary)

DIF: Memorization  REF:  p. 7  OBJ: 4  TOP: Anatomical position

11. Name and explain the 10 anatomical directions.

ANS: (Answers may vary)

DIF: Memorization  REF:  p. 7  OBJ: 5  TOP: Anatomical directions

12. Name and describe the three planes or body sections.

ANS: (Answers may vary)

DIF: Memorization  REF:  pp. 8-9  OBJ: 5  TOP: Planes or body sections

13. Describe the parts of the ventral body cavity.

ANS: (Answers may vary)

DIF: Memorization  REF:  p. 9  OBJ: 6  TOP: Body cavities

14. Describe the parts of the dorsal cavity and explain what each part contains.

ANS: (Answers may vary)

DIF: Memorization  REF:  p. 9  OBJ: 6  TOP: Body cavities

15. What makes up the axial portion of the body? What makes up the appendicular portion of the body?

ANS: (Answers may vary)

DIF: Memorization  REF:  p. 13 (Table 1-2)  OBJ: 8  TOP: Body regions