***Human Anatomy, 6e* (Saladin)**

**Chapter 1 The Study of Human Anatomy**

1) Which of the following is *not* true?

A) Anatomy is the study of the structure of the body.

B) Gross anatomy is the study of tissues and cells.

C) Comparative anatomy is the study of more than one species.

D) Regional anatomy is the study of multiple organ systems in a specific area of the body.

E) Systemic anatomy focuses on one organ system at a time.

2) The study of microscopic tissues is called \_\_\_\_\_\_\_\_.

A) cytology

B) gross anatomy

C) dissection

D) histology

E) auscultation

3) A subdiscipline of anatomy in which multiple organ systems are studied in a specific area of the body is \_\_\_\_\_\_\_\_ anatomy.

4) \_\_\_\_\_\_\_\_ anatomy is the study of structures visible to the naked eye.

5) Functional \_\_\_\_\_\_\_\_ goes beyond simply studying the structure of organs and provides reasons for them.

6) Regional anatomy is the study of multiple organ systems at once in a particular portion of the body.

7) Which of the following is *true* regarding systemic versus regional anatomy?

A) Systemic anatomy focuses on only one system at a time.

B) Regional anatomy focuses on only one system at a time.

C) Systemic anatomy focuses on several organ systems.

D) Systemic anatomy focuses on several regions of the body.

8) Auscultation is \_\_\_\_\_\_\_\_.

A) listening to natural sounds made by the body

B) looking at the body's appearance in a physical examination

C) feeling a structure with the hands

D) tapping on the body and feeling for resistance

E) examining test results for diagnosis of symptoms involving the abdominal cavity

9) Feeling a structure, like a swollen lymph node, with the hands is called \_\_\_\_\_\_\_\_.

10) Listening to natural sounds made by the body is called \_\_\_\_\_\_\_\_.

11) If a physician feels for broken bones under the skin, she would be utilizing the method of study referred to as \_\_\_\_\_\_\_\_.

12) Percussion is the tapping of a body part for examination.

13) Which medical imaging technique relies on the injection of radioactively labeled glucose and reveals which tissues are most metabolically active?

A) Positron emission tomography (PET) scan

B) Sonography

C) Computed tomography (CT) scan

D) Magnetic resonance imaging (MRI)

E) Radiography

14) Which medical imaging technique relies on the absorption of high-energy radiation and reveals dense tissues, such as bone and teeth?

A) Positron emission tomography (PET) scan

B) Sonography

C) Computed tomography (CT) scan

D) Magnetic resonance imaging (MRI)

E) Radiography

15) Which medical imaging technique would be most useful for revealing a tumor in the brain?

A) Computed tomography (CT) scan

B) Radiography

C) Sonography

D) Echocardiography

E) Either a CT scan or sonography would be appropriate.

16) You want to determine which part of the brain is most active when a person is forming a sentence before they say the words out loud. Which imaging technique would be most useful?

A) Radiography

B) Angiography

C) Positron emission tomography (PET scan)

D) Computed tomography (CT scan)

E) Sonography

17) Which imaging technique is most commonly used to view a fetus *in utero*?

A) Radiography

B) Computed tomography (CT)

C) Magnetic resonance imaging (MRI)

D) Sonography

E) Positron emission tomography (PET)

18) \_\_\_\_\_\_\_\_ resonance imaging is an imaging technique that relies on electromagnets to reveal images of soft tissue.

19) \_\_\_\_\_\_\_\_ is the imaging technique most often used to reveal a fetus *in utero*.

20) \_\_\_\_\_\_\_\_ is the branch of medicine concerned with imaging techniques.

21) To produce images of soft tissue in the body, \_\_\_\_\_\_\_\_ resonance imaging would be utilized.

22) Positron emission tomography (PET scan) assesses the metabolic state of a tissue.

23) *Situs inversus* is a condition in which \_\_\_\_\_\_\_\_.

A) an individual has no lenses in the eye

B) the kidney is flipped anterior to posterior

C) the organs of the thoracic and abdominal cavities are reversed between right and left

D) the appendix is affixed to the small intestine instead of the large intestine

E) an individual has incessant and painful heartburn

24) Though external appearances differ significantly, internal anatomy between humans is all the same.

25) The fact that most of us have five lumbar vertebrae, but some people have six and some have four, is an example of \_\_\_\_\_\_\_\_ variation among organisms.

A) cellular

B) holistic

C) physiological

D) anatomical

E) reductionist

26) Which of the following lists the levels of human structure *from smallest to largest?*

A) Organelles, organisms, organs, organ systems

B) Organelles, cells, organs, tissues, organisms

C) Cells, organisms, organelles, organs, organ systems

D) Cells, organs, tissues, organisms, organ systems

E) Organelles, cells, tissues, organs, organ systems

27) By definition, an organ is composed of two or more \_\_\_\_\_\_\_\_ types.

A) organelle

B) tissue

C) organ system

D) molecule

E) cell

28) Why is the liver considered to be an organ?

A) It is part of the digestive system.

B) It has complex physiological functions.

C) It is larger than a cell.

D) It is composed of two or more tissue types.

E) It has a complex blood supply.

29) In regards to human structure, which of the following is the smallest unit considered to be alive?

A) Organelle

B) Tissue

C) Molecule

D) Cell

E) Organ

30) The smallest structures that biologists consider to be living are \_\_\_\_\_\_\_\_.

A) organisms

B) organs

C) macromolecules

D) cells

E) organelles

31) A structure composed of two or more tissues is a/an \_\_\_\_\_\_\_\_.

32) The smallest unit that carries out all the basic functions of life is a \_\_\_\_\_\_\_\_.

33) A/an \_\_\_\_\_\_\_\_ is made from two or more atoms.

34) Organs are composed of two or more tissue types.

35) Which of the following lists the levels of human structure *from the most complex to the simplest*?

A) Organelle, cell, tissue, organ, organ system

B) Organ system, organ, cell, tissue, organelle

C) Organ system, organelle, tissue, cell, organ

D) Organ system, organ, tissue, cell, organelle

E) Organ, organ system, tissue, cell, organelle

36) Which of the following lists examples of body structures *from the simplest to the most complex*?

A) Mitochondrion, connective tissue, protein, stomach, adipocyte (fat cell)

B) Protein, mitochondrion, adipocyte (fat cell), connective tissue, stomach

C) Mitochondrion, connective tissue, stomach, protein, adipocyte (fat cell)

D) Protein, adipocyte (fat cell), stomach, connective tissue, mitochondrion

E) Protein, stomach, connective tissue, adipocyte (fat cell), mitochondrion

37) Of the following terms, which of them represents the *organ system* level of organization: glucose, osteocyte, epithelial, endocrine, oxygen?

A) Endocrine

B) Glucose

C) Osteocyte

D) Epithelial

E) Oxygen

38) Of the following terms, which of them represents the *cellular* level of organization: carbon dioxide, lymphatic, osteocyte, digestive, epithelial?

A) Osteocyte

B) Carbon dioxide

C) Lymphatic

D) Digestive

E) Epithelial

39) Which organ system has the principal functions of protection, water retention, thermoregulation, vitamin D synthesis, cutaneous sensation, and nonverbal communication?

A) Skeletal system

B) Urinary system

C) Integumentary system

D) Muscular system

40) Which of the following is *not* a system of intake and output?

A) Muscular system

B) Respiratory system

C) Digestive system

D) Urinary system

41) The principal functions of the \_\_\_\_\_\_\_\_ system include the absorption of oxygen, discharge of carbon dioxide, maintaining the acid-base balance, and speech.

42) It is improper in anatomy to combine two systems when describing specific locations (e.g. genitourinary system).

43) All of the following are human organ systems *except \_\_\_\_\_\_\_\_.*

A) skeletal

B) endocrine

C) epidermal

D) reproductive

E) lymphatic

44) Which of the following organ systems does *not* function in supporting the body?

A) Digestive

B) Integumentary

C) Skeletal

D) Muscular

45) The directional language of anatomy begins with what assumption about the position of the body?

A) It is in a prone position.

B) It is in anatomical position.

C) It is in a supine position.

D) There are no assumptions made.

46) Which of the following is *not* a criterion of anatomical position?

A) Standing erect

B) Feet flat on the floor

C) Arms raised over the head

D) Palms forward

47) When the palms of the hand face up, or anteriorly, they are referred to as \_\_\_\_\_\_\_\_.

48) If a person is in anatomical position, which of the following statements would be *true*?

A) Their palms are facing forward.

B) They are lying down, face up.

C) Their arms are raised above their head.

D) Their head is turned to the left.

E) Their head is turned to the right.

49) Which of the following descriptions of anatomical position is correct?

A) Standing, facing forward, arms at side, palms forward

B) Prone, facing down, arms at side, palms forward

C) Supine, facing up, arms at side, palms back

D) Prone, facing up, arms at side, palms back

50) The \_\_\_\_\_\_\_\_ plane passes through the midline of the body and divides it into equal right and left halves.

A) median

B) transverse

C) frontal

D) oblique

51) Which plane would allow for the observation of both lungs, the heart, and the abdominal organs?

A) Frontal

B) Sagittal

C) Transverse

D) Median

52) Transverse planes divide the body into superior and inferior portions.

53) Which of the following planes through the body would yield a section containing parts of only one kidney?

A) Parasagittal

B) Frontal

C) Coronal

D) Transverse

54) Which of the following statements using directional terminology and regional anatomy is *true*?

A) The patellar area is anterior to the popliteal area.

B) The lumbar area is superior to the cervical area.

C) The axillary area is medial to the sternal area.

D) The cubital area is distal to the carpal area.

55) What is the directional term for "away from the midline"?

A) Caudal

B) Rostral

C) Lateral

D) Ipsilateral

56) Using directional terminology, one could say that the liver is \_\_\_\_\_\_\_\_ to the bladder.

57) Using directional terminology, one could say that the muscles of the arm are \_\_\_\_\_\_\_\_ to the bones of the arm.

58) Anterior refers to the back of the body.

59) Which of the following statements using directional terminology is *true*?

A) The hand is distal to the elbow.

B) The lungs are medial to the heart.

C) The knee is proximal to the hip.

D) The left ear is ipsilateral to the right eye.

60) Using directional terminology, one would say that the shin is \_\_\_\_\_\_\_\_ relative to the knee.

61) Using directional terminology, one would say that the sternum is \_\_\_\_\_\_\_\_ relative to the armpit.

62) Which of the following is *not* found in the axial region of the body?

A) Cervical region

B) Abdominal region

C) Thoracic region

D) Carpal region

63) Of the nine abdominal regions, the central region is referred to as the \_\_\_\_\_\_\_\_ region.

A) lumbar

B) umbilical

C) hypogastric

D) inguinal

64) The posterior portion of the knee is known as the \_\_\_\_\_\_\_\_ region.

65) The forearm is more appropriately referred to as the \_\_\_\_\_\_\_\_ region.

66) The urinary bladder is found within the hypogastric region of the abdomen.

67) The plantar surface refers to the sole of the foot.

68) Which of the following structures is contained within the vertebral canal?

A) Brain

B) Heart

C) Lungs

D) Spinal cord

69) Which of the following is *not* contained within the abdominal cavity?

A) Stomach

B) Bladder

C) Spleen

D) Kidneys

70) The brain and spinal cord are covered by the \_\_\_\_\_\_\_\_, composed of three membrane layers.

71) The visceral \_\_\_\_\_\_\_\_ is the serous membrane covering the external surface of the lungs.

72) Pleural fluid surrounds the pericardial cavity.

73) In normal circumstances, if membranes of adjacent structures appear to be pressed firmly together and no actual space is observed between them, this is referred to as a \_\_\_\_\_\_\_\_ space.

A) visceral

B) mesenter

C) potential

D) peritoneal

74) The pleural cavity is a potential space.

75) The roots of anatomical terminology lie mainly in which language(s)?

A) Gaelic

B) Spanish and French

C) Latin and Greek

D) Russian and Finnish

E) Mandarin Chinese

76) Why are many anatomical terms based on Greek and Latin roots?

A) They are easy to spell.

B) Many terms are based on the names of Greek and Roman physicians.

C) Scientific investigation began in ancient Greece and Rome.

D) Modern-day scientists study Greek and Latin.

E) Greek and Latin words are more descriptive than English words.

77) Non-descriptive terms for structures that are coined from the names of people are called \_\_\_\_\_\_\_\_.

78) The terms "crypts of Lieberkuhn" and "intestinal glands" refer to the same structures. Which one, if either, is an eponym?

A) Intestinal glands

B) Crypts of Lieberkuhn

C) Both intestinal glands and Crypts of Lieberkuhn are eponyms.

D) Neither intestinal glands nor Crypts of Lieberkuhn are eponyms.

79) The *Nomina Anatomica* rejected all eponyms and gave each structure a unique \_\_\_\_\_\_\_\_ name.

A) English

B) Japanese

C) German

D) Latin

80) Which source is the current standard of human anatomical names?

A) *Encyclopedia Anatomica*

B) *Terminologia Anatomica*

C) *Eponymia Anatomica*

D) *Nomina Anatomica*

81) Most anatomical terms have Greek and Latin roots because \_\_\_\_\_\_\_\_.

A) they were the most widely spoken languages across the world when anatomy began

B) they were the easiest languages to understand

C) scientific investigation began in Greece and Rome

D) these languages had the most flexibility

82) In the term *hepatocyte*, both *hepato-* and -*cyte* are roots.

83) If the root of a scientific term is consistent, the suffix has no effect on the final term.

84) The word acetabulum literally means "vinegar cup," though it is the name of the hip socket. Considering this, select all that are true.

A) Acetabulum is an eponym.

B) Acetabulum is an acronym.

C) The literal meaning of acetabulum does not lend much insight into its anatomical meaning.

D) The hip socket was named based on its appearance.

85) Select all the anatomical terms that are in their plural form.

A) Diagnosis

B) Microvilli

C) Ovaries

D) Phalanx

86) What is the proper plural form of *epiphysis*?

A) Epiphices

B) Epiphyses

C) Epiphi

D) Epiphysises

87) The plural of villus (hair) is \_\_\_\_\_\_\_\_, whereas the plural of diagnosis is \_\_\_\_\_\_\_\_.

A) villuses; diagnosises

B) villi; diagnoses

C) villus; diagnosis

D) villi; diagnosis

E) villuses; diagnosis

88) The plural of axilla (armpit) is \_\_\_\_\_\_\_\_, whereas the plural of appendix is \_\_\_\_\_\_\_\_.

A) axillae; appendices

B) axillides; appendages

C) axillies; appendi

D) axilli; appendices

89) Misspelling a single letter can result in an anatomical term that refers to a completely different structure.

90) Changing the word *occipital* to *occipitalis* transforms a bone name to a muscle name. This best demonstrates which of the following?

A) The importance of precision in spelling

B) How anatomical terms can originate

C) A comparison of eponyms to antonyms

D) The comparison of singular and plural forms of a noun

91) Precise spelling is important in anatomy because \_\_\_\_\_\_\_\_.

A) it's important to practice language skills

B) there are many different ways to spell certain terms

C) eponyms are difficult to memorize

D) there are many similar terms in anatomy that refer to different structures

E) it's easier to remember acronyms when spelled correctly