

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Which of the following activities represents physiological studies: 1) \_\_\_\_\_
- A) making a section through the heart to observe its interior
  - B) examining the surface of a bone
  - C) drawing blood from laboratory animals to determine their blood sugar levels
  - D) viewing muscle tissue through a microscope
  - E) observing the parts of a reproducing cell
- 2) The lymphatic system: 2) \_\_\_\_\_
- A) produces heat
  - B) picks up fluid leaked from blood vessels and returns it to the blood
  - C) responds to internal and external changes by activating appropriate muscles and glands
  - D) synthesizes vitamin D
  - E) secretes hormones that regulate processes such as growth, reproduction, and nutrient use (metabolism) by body cells
- 3) Which of the following statements is true regarding the vertebral, occipital, and buccal regions: 3) \_\_\_\_\_
- A) only the occipital and buccal regions are located dorsally
  - B) all of these regions are located dorsally
  - C) only the vertebral and buccal regions are located dorsally
  - D) none of these regions is located dorsally
  - E) only the vertebral and occipital regions are located dorsally
- 4) Which of the following is an anterior body landmark: 4) \_\_\_\_\_
- A) antecubital region
  - B) calcaneal region
  - C) gluteal region
  - D) scapular region
  - E) vertebral region
- 5) In describing the relationship between the patellar and femoral regions: 5) \_\_\_\_\_
- A) the patellar region is distal to the femoral region
  - B) the patellar region is superior to the femoral region
  - C) the patellar region is lateral to the femoral region
  - D) the patellar region is dorsal to the femoral region
  - E) the patellar region is proximal to the femoral region

- 6) The ovary is part of which of the following two systems: 6) \_\_\_\_\_
- A) endocrine and respiratory systems
  - B) reproductive and respiratory systems
  - C) digestive and respiratory systems
  - D) reproductive and endocrine systems
  - E) digestive and endocrine systems
- 7) Which of the following is the correct sequence, going from superior to inferior, on the medial abdominal surface: 7) \_\_\_\_\_
- A) hypogastric region, umbilical region, epigastric region
  - B) epigastric region, hypogastric region, umbilical region
  - C) epigastric region, umbilical region, hypogastric region
  - D) hypogastric region, epigastric region, umbilical region
  - E) umbilical region, hypogastric region, epigastric region
- 8) In anatomical position: 8) \_\_\_\_\_
- A) the body is laying face up with the feet parallel and the arms at the sides with the palms facing forward
  - B) the body is erect with the feet parallel and the arms hanging at the sides with the palms facing forward
  - C) the body is erect with the feet parallel and the arms hanging at the sides with the palms facing backward
  - D) the body is laying face down with the feet parallel and the arms at the sides with the palms facing backward
  - E) the body is laying face up with the feet parallel and the arms at the sides with the palms facing backward
- 9) Which ventral cavity subdivision has no bony protection: 9) \_\_\_\_\_
- A) pelvic
  - B) spinal
  - C) abdominal
  - D) cranial
  - E) thoracic

- 10) The molecules in the cell membrane that serve as receptors or binding sites for hormones or other chemical messengers are the: 10) \_\_\_\_\_
- A) glycoproteins
  - B) proteins
  - C) lipids
  - D) cholesterol molecules
  - E) carbohydrates
- 11) Which of the following is NOT true of epithelial tissue: 11) \_\_\_\_\_
- A) it covers all free body surfaces and lines the hollow cavities of organs
  - B) it forms continuous cellular sheets
  - C) it forms glands
  - D) it has a good blood supply within it and is very vascular
  - E) it rests on a basement membrane
- 12) The molecule that carries an amino acid to the ribosome for incorporation into a protein is: 12) \_\_\_\_\_
- A) ATP
  - B) transfer RNA (tRNA)
  - C) ribosomal RNA (rRNA)
  - D) DNA
  - E) messenger RNA (mRNA)
- 13) The epithelial tissue found in areas subject to considerable stretching, such as the urinary bladder, is: 13) \_\_\_\_\_
- A) pseudostratified columnar epithelium
  - B) stratified squamous epithelium
  - C) simple squamous epithelium
  - D) simple columnar epithelium
  - E) transitional
- 14) Place the four steps in DNA replication in the proper sequence: 14) \_\_\_\_\_
- (1) DNA separates into its two nucleotide chains
  - (2) two DNA molecules are formed that are identical to the original DNA helix
  - (3) DNA helix unwinds
  - (4) each strand acts as a template for building a new complementary strand
- A) 4, 3, 1, 2      B) 2, 4, 1, 3      C) 3, 1, 4, 2      D) 4, 1, 3, 2      E) 1, 2, 4, 3

- 15) Glands, such as the thyroid, that secrete their products directly into the blood rather than through ducts are classified as: 15) \_\_\_\_\_
- A) ceruminous
  - B) endocrine
  - C) exocrine
  - D) sudoriferous
  - E) sebaceous
- 16) Two types of endocytosis are: 16) \_\_\_\_\_
- A) solute pumping and active transport
  - B) phagocytosis and pinocytosis
  - C) active transport and phagocytosis
  - D) cellular secretion and solute pumping
  - E) pinocytosis and passive transport
- 17) The tissue that is usually well vascularized and has an extensive intercellular matrix is called: 17) \_\_\_\_\_
- A) nervous tissue
  - B) muscle tissue
  - C) connective tissue
  - D) brain tissue
  - E) epithelial tissue
- 18) The patella is a: 18) \_\_\_\_\_
- A) irregular bone
  - B) flat bone
  - C) short bone
  - D) sesamoid bone and a short bone
  - E) sesamoid bone
- 19) The hyoid bone is unique because: 19) \_\_\_\_\_
- A) it has no specific function
  - B) it is covered with mucosa
  - C) it has an unusual shape
  - D) it is the only bone of the body that does not directly articulate with any other bone
  - E) it largely consists of cartilage

- 20) Red bone marrow functions to \_\_\_\_\_, whereas yellow bone marrow functions to \_\_\_\_\_. 20) \_\_\_\_\_
- A) produce blood cells; store fat tissue
  - B) provide osteoclasts; produce osteocytes
  - C) provide osteocytes; produce osteoblasts
  - D) produce adipose tissue; produce blood cells
  - E) provide osteocytes; produce blood cells
- 21) A shallow, basin-like depression in a bone often serving as an articular surface is a: 21) \_\_\_\_\_
- A) groove
  - B) sinus
  - C) meatus
  - D) foramen
  - E) fossa
- 22) The two largest foot bones are the: 22) \_\_\_\_\_
- A) metatarsals 4 and 5
  - B) middle and proximal phalanges
  - C) talus and calcaneus
  - D) distal and middle phalanges
  - E) metatarsals 1 and 2
- 23) The greater tubercle is located on the: 23) \_\_\_\_\_
- A) humerus
  - B) femur
  - C) radius
  - D) ulna
  - E) tibia
- 24) The canal that runs through the core of each osteon contains: 24) \_\_\_\_\_
- A) osteoclasts and osteoblasts
  - B) yellow marrow and Sharpey's fibers
  - C) cartilage and lamellae
  - D) red marrow
  - E) blood vessels and nerve fibers
- 25) Paralysis of which of the following would make an individual unable to flex the thigh: 25) \_\_\_\_\_
- A) vastus medialis
  - B) iliopsoas and rectus femoris
  - C) vastus lateralis
  - D) biceps femoris
  - E) vastus intermedius

- 26) Which one of the following does NOT compress the abdomen: 26) \_\_\_\_\_
- A) internal oblique
  - B) external oblique
  - C) rectus abdominis
  - D) latissimus dorsi
  - E) transversus abdominis
- 27) Which of the following muscles enables raising of the eyebrows and horizontal wrinkling of the forehead: 27) \_\_\_\_\_
- A) the frontalis
  - B) the temporalis
  - C) the zygomaticus
  - D) the masseter
  - E) the buccinator
- 28) Which one of the following muscle actions would NOT be classified as an ISOTONIC contraction: 28) \_\_\_\_\_
- A) throwing a ball
  - B) lifting a glass of water to your mouth
  - C) pushing against a stationary wall
  - D) writing a letter
  - E) typing your shoe
- 29) A sarcomere is: 29) \_\_\_\_\_
- A) the contractile unit between two Z lines
  - B) the nonfunctional unit of skeletal muscle
  - C) the area between two intercalated discs
  - D) a compartment in a myofilament
  - E) the wavy lines on the cell, as seen in a microscope
- 30) The mechanical force of contraction is generated by: 30) \_\_\_\_\_
- A) shortening of the thin filaments
  - B) shortening of the thick filaments
  - C) a sliding of thin filaments past thick ones
  - D) the temporary disappearance of thin filaments
  - E) the "accordian-like" folding of thin and thick filaments

- 31) Which one of these effectors is NOT directly controlled by the autonomic nervous system: 31) \_\_\_\_\_
- A) skeletal muscle
  - B) smooth muscle
  - C) abdominal organs
  - D) cardiac muscle
  - E) most glands
- 32) The sciatic nerve is the largest nerve in the body resulting from a combination of which two nerves: 32) \_\_\_\_\_
- A) femoral and tibial nerves
  - B) pudendal and common peroneal nerves
  - C) pudendal and tibial nerves
  - D) pudendal and femoral nerves
  - E) common fibular and tibial nerves
- 33) A shallow groove located on the surface of the cerebral cortex is called a: 33) \_\_\_\_\_
- A) gyrus                      B) furrow                      C) tract                      D) fissure                      E) sulcus
- 34) Which one of the following describes how the interior surface of a cell membrane of a polarized neuron differs from the external environment? The interior is: 34) \_\_\_\_\_
- A) negatively charged and contains more sodium
  - B) neutral and contains the same amount of sodium
  - C) positively charged and contains more sodium
  - D) negatively charged and contains less sodium
  - E) positively charged and contains less sodium
- 35) Which one of the following best describes the waxy-appearing material called *myelin*: 35) \_\_\_\_\_
- A) a lipid-protein (lipoprotein) cell membrane on the outside of axons
  - B) a mass of white lipid material that surrounds the cell body of a neuron
  - C) a mass of white lipid material that surrounds the dendrites of a neuron
  - D) a mass of white lipid material that insulates the axon of a neuron
  - E) an outer membrane on a neuroglial cell
- 36) The ion essential for blood clotting is: 36) \_\_\_\_\_
- A) hydrogen                      B) sodium                      C) iodine                      D) potassium                      E) calcium

37) Which one of the following represents the proper sequence of hemostasis: 37) \_\_\_\_\_  
A) coagulation, platelet plug formation, vascular spasm  
B) coagulation, vascular spasm, platelet plug formation  
C) platelet plug formation, vascular spasm, coagulation  
D) vascular spasm, coagulation, platelet plug formation  
E) platelet plug formation, coagulation, vascular spasm

38) Platelets are fragments of multinucleate cells called: 38) \_\_\_\_\_  
A) erythrocytes  
B) megakaryocytes  
C) eosinophils  
D) macrophages  
E) basophils

39) Bleeding disorders often result from a lack of which one of the following vitamins: 39) \_\_\_\_\_  
A) vitamin K  
B) vitamin B12  
C) vitamin A  
D) vitamin C  
E) vitamin D

40) A clot that breaks away from a vessel wall and circulates freely within the bloodstream is called a(n): 40) \_\_\_\_\_  
A) thrombus  
B) thromboplastin  
C) fibrin  
D) clotting cascade  
E) embolus

41) The carotid artery is located in the: 41) \_\_\_\_\_  
A) neck                      B) groin                      C) leg                      D) abdomen                      E) armpit

42) When the ventricles contract, the bicuspid (mitral) valve prevents blood from flowing from the: 42) \_\_\_\_\_  
A) left ventricle to the right ventricle  
B) left ventricle to the left atrium  
C) right atrium to the left atrium  
D) right ventricle to the right atrium  
E) left atrium to the right atrium



- 43) The atria of the heart are the chambers that are: 43) \_\_\_\_\_
- A) located inferiorly and are the receiving chambers of the heart
  - B) located superiorly and are the discharging chambers of the heart
  - C) located inferiorly and are the discharging chambers of the heart
  - D) located superiorly and are the receiving chambers of the heart
  - E) located posteriorly and are the discharging chambers of the heart
- 44) Which one of the following blood vessels carries oxygenated blood: 44) \_\_\_\_\_
- A) superior vena cava
  - B) coronary sinus
  - C) inferior vena cava
  - D) pulmonary vein
  - E) pulmonary artery
- 45) The reflex that helps an infant hold on to the nipple and swallow is called the: 45) \_\_\_\_\_
- A) fetal reflex
  - B) rooting reflex
  - C) sucking reflex
  - D) peristaltic reflex
  - E) nursing reflex
- 46) The sequence of steps by which large food molecules are broken down into their respective building blocks by catalytic enzymes within hydrolysis reactions is called: 46) \_\_\_\_\_
- A) ingestion
  - B) propulsion
  - C) mechanical digestion
  - D) absorption
  - E) chemical digestion
- 47) Which of the following influence the release of pancreatic juice and bile: 47) \_\_\_\_\_
- A) gastrin and renin
  - B) cholecystokinin and gastrin
  - C) secretin and gastrin
  - D) cholecystokinin and secretin
  - E) renin and cholecystokinin

- 48) Negative feedback systems: 48) \_\_\_\_\_
- A) regulate heart and breathing rates, and operate in such a way that the initial stimulus is enhanced and increases
  - B) regulate heart and breathing rates, and operate in such a way that the initial stimulus is shut off or reduced
  - C) operate in such a way that the initial stimulus is enhanced and increases
  - D) operate in such a way that the initial stimulus is shut off or reduced
  - E) regulate heart and breathing rates
- 49) Which of the following is the correct sequence, going from simplest to most complex, in the levels of structural organization of the human body: 49) \_\_\_\_\_
- A) cellular level, chemical level, tissue level, organ system level, organismal level, organ level
  - B) chemical level, tissue level, cellular level, organ system level, organ level, organismal level
  - C) cellular level, tissue level, chemical level, organ level, organ system level, organismal level
  - D) cellular level, chemical level, tissue level, organ level, organ system level, organismal level
  - E) chemical level, cellular level, tissue level, organ level, organ system level, organismal level
- 50) The smallest living unit of all living things is: 50) \_\_\_\_\_
- A) a tissue
  - B) a cell
  - C) an organ
  - D) the organism
  - E) a molecule
- 51) Intercalated disks are found in: 51) \_\_\_\_\_
- A) both skeletal and smooth muscle tissue
  - B) cardiac muscle tissue only
  - C) skeletal muscle tissue only
  - D) smooth muscle tissue only
  - E) both cardiac and smooth muscle tissue
- 52) The type of muscle found in the walls of hollow organs, such as the stomach, and in the walls of blood vessels is: 52) \_\_\_\_\_
- A) skeletal muscle
  - B) smooth muscle
  - C) cardiac muscle
  - D) both cardiac muscle and skeletal muscle
  - E) both smooth muscle and skeletal muscle

- 53) Which one of the following is NOT true about the cell membrane: 53) \_\_\_\_\_
- A) it regulates the entry and exit of cell materials
  - B) it consists of two lipid layers
  - C) it allows water soluble molecules to pass through easily
  - D) its lipid components are primarily phospholipids and cholesterol
  - E) it contains proteins for specialized functions
- 54) The foramen magnum passes through the: 54) \_\_\_\_\_
- A) axis
  - B) occipital bone
  - C) atlas
  - D) coxal bone
  - E) temporal bone
- 55) The major portion of the coxal bone is the: 55) \_\_\_\_\_
- A) false pelvis
  - B) pubis
  - C) ischium
  - D) sacrum
  - E) ilium
- 56) The insertion of the gluteus maximus is the: 56) \_\_\_\_\_
- A) femur            B) tibia            C) sacrum            D) ilium            E) calcaneus
- 57) The striations that give skeletal muscle its characteristic striped appearance are produced, for the most part, by: 57) \_\_\_\_\_
- A) the T tubules
  - B) the arrangement of myofilaments
  - C) a difference in the thickness of the sarcolemma
  - D) the sarcoplasmic reticulum
  - E) the "cocked" positions of the heads of the thick filaments
- 58) The area of the brain stem that plays a role in consciousness and the awake/sleep cycles is the: 58) \_\_\_\_\_
- A) limbic system
  - B) reticular activating system (RAS)
  - C) thalamus
  - D) cerebellum
  - E) pineal body

- 59) Afferent nerves are called \_\_\_\_\_, and motor nerves are called \_\_\_\_\_. 59) \_\_\_\_\_
- A) motor nerves; sensory nerves
  - B) peripheral nerves; cranial nerves
  - C) sensory nerves; efferent nerves
  - D) cranial nerves; peripheral nerves
  - E) mixed nerves; motor nerves
- 60) Anemias appearing in old age result from all of the following EXCEPT: 60) \_\_\_\_\_
- A) leukemia
  - B) vitamin deficiencies
  - C) nutritional deficiencies
  - D) drug therapy
  - E) erythrocyte mutations
- 61) Severe shock occurs with blood loss of: 61) \_\_\_\_\_
- A) over 30 percent
  - B) over 10 percent
  - C) over 5 percent
  - D) over 20 percent
  - E) over 50 percent
- 62) The path of blood flow within the systemic vascular system is: 62) \_\_\_\_\_
- A) arterioles, arteries, capillary beds, veins, venules
  - B) arteries, arterioles, capillary beds, veins, venules
  - C) arterioles, arteries, venules, veins, capillary beds
  - D) arteries, arterioles, capillary beds, venules, veins
  - E) arterioles, arteries, capillary beds, venules, veins
- 63) The hereditary inability of tissue cells to metabolize the amino acid phenylalanine, which can result in brain damage and retardation unless a special diet low in phenylalanine is followed, is called: 63) \_\_\_\_\_
- A) cleft palate
  - B) cleft lip
  - C) tracheoesophageal fistula
  - D) cystic fibrosis
  - E) phenylketonuria

- 64) Which of the following is the correct sequence, going from superior to inferior, on the lateral abdominal surface: 64) \_\_\_\_\_
- A) lumbar region, hypochondriac region, iliac region
  - B) iliac region, hypochondriac region, lumbar region
  - C) lumbar region, iliac region, hypochondriac region
  - D) hypochondriac region, lumbar region, iliac region
  - E) iliac region, lumbar region, hypochondriac region
- 65) Which of the following statements about RNA is correct: 65) \_\_\_\_\_
- A) it contains 2 chains
  - B) it has the base uracil instead of thymine
  - C) it is composed of amino acids
  - D) it never leaves the nucleus
  - E) it contains deoxyribose sugars
- 66) Which of the following groups of bones in the human body, categorized according to shape, is correct: 66) \_\_\_\_\_
- A) skull bones - flat bones
  - B) wrist and ankle bones - long bones
  - C) cranium - sesamoid bones
  - D) arm and leg bones - short bones
  - E) coxal bones - irregular bones
- 67) Which one of the following muscles is involved in dorsiflexion and inversion at the ankle joint: 67) \_\_\_\_\_
- A) tibialis anterior
  - B) hamstrings
  - C) quadriceps group
  - D) extensor digitorum
  - E) peroneus muscles
- 68) The posterior side of the leg and foot is served by which nerve: 68) \_\_\_\_\_
- A) obturator
  - B) peroneal
  - C) tibial
  - D) median
  - E) femoral
- 69) The universal recipient has blood type: 69) \_\_\_\_\_
- A) A
  - B) B
  - C) AB
  - D) ABO
  - E) O

- 70) Substances tend to leave the bloodstream at the arterial end of the capillary because: 70) \_\_\_\_\_
- A) the osmotic pressure of the blood is higher at the venular end of the capillary
  - B) blood pressure is higher at the venular end of the capillary
  - C) interstitial pressure is higher at the arterial end of the capillary
  - D) blood pressure is higher at the arterial end of the capillary
  - E) the osmotic pressure of the blood is higher at the arterial end of the capillary
- 71) Which one of the following is NOT absorbed by the human large intestine: 71) \_\_\_\_\_
- A) water
  - B) vitamin K
  - C) protein
  - D) some of the B vitamins
  - E) ions
- 72) The structure that delivers digestive enzymes to the small intestine is/are the: 72) \_\_\_\_\_
- A) liver
  - B) pancreas
  - C) pharynx
  - D) adrenal glands
  - E) lymphoid organs
- 73) Once solid material is phagocytized and taken into a vacuole, which of the following statements best describes what happens: 73) \_\_\_\_\_
- A) a ribosome enters the vacuole and uses the amino acids in the "invader" to form new protein
  - B) oxygen enters the vacuole and "burns" the enclosed solid material
  - C) the vacuole remains separated from the cytoplasm and the solid material persists unchanged
  - D) a lysosome combines with the vacuole and digests the enclosed solid material
  - E) cilia propel the material throughout the cell interior
- 74) The atlas is the: 74) \_\_\_\_\_
- A) last lumbar vertebra
  - B) part of the sacrum
  - C) second cervical vertebra
  - D) first thoracic vertebra
  - E) first cervical vertebra

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

- 75) The lymphatic system secretes hormones that regulate processes such as growth, reproduction, and nutrient use by cells. 75) \_\_\_\_\_

- 76) The thoracic cavity is separated from the abdominopelvic cavity by the diaphragm. 76) \_\_\_\_\_
- 77) The cervical area refers to the genital region. 77) \_\_\_\_\_
- 78) The greater the osmotic pressure, the greater the tendency of water to move into that area. 78) \_\_\_\_\_
- 79) The movement of substances from an area of higher hydrostatic pressure to an area of lower hydrostatic pressure is called *diffusion*. 79) \_\_\_\_\_
- 80) Most of the stress on the vertebral column occurs on the sturdiest vertebrae in the sacral region. 80) \_\_\_\_\_
- 81) The diaphysis of a long bone is composed of spongy bone. 81) \_\_\_\_\_
- 82) A contraction in which a skeletal muscle does not shorten but its tension increases is called isometric. 82) \_\_\_\_\_
- 83) A sustained partial contraction of skeletal muscle is called muscle tone. 83) \_\_\_\_\_
- 84) Acetylcholine is the substance released by the axonal endings of somatic efferent fibers and by parasympathetic nerve fiber endings. 84) \_\_\_\_\_
- 85) Reflexes are rapid, predictable, and automatic responses to stimuli. 85) \_\_\_\_\_
- 86) Rh-related problems occur in pregnant Rh<sup>-</sup> women carrying an Rh<sup>+</sup> baby. 86) \_\_\_\_\_
- 87) Smooth muscle and elastic tissue in a blood vessel wall is found primarily in the tunica media. 87) \_\_\_\_\_
- 88) Brush border enzymes break down double sugars into simple sugars but have no effect on protein digestion. 88) \_\_\_\_\_
- 89) Excretion is the process of removing wastes from the body. 89) \_\_\_\_\_
- 90) When a cell is placed in a hypotonic solution it will swell and may rupture. 90) \_\_\_\_\_
- 91) The heaviest, strongest bone in the body is the femur. 91) \_\_\_\_\_
- 92) A prime mover of the arm that acts in adduction is the deltoid. 92) \_\_\_\_\_
- 93) Efferent nerve fibers may be described as motor nerve fibers. 93) \_\_\_\_\_
- 94) An abnormally low WBC count is called leukopenia. 94) \_\_\_\_\_
- 95) The right and left common iliac veins receive oxygenated blood directly from the abdominal aorta which then sends the blood directly to the right and left external iliac arteries. 95) \_\_\_\_\_

- 96) The lacy apron of the peritoneum that covers the abdominal organs is called the lesser omentum. 96) \_\_\_\_\_
- 97) The highest level of structural organization in humans is the organ level. 97) \_\_\_\_\_
- 98) Cholesterol synthesis and breakdown takes place in the rough endoplasmic reticulum. 98) \_\_\_\_\_
- 99) The layman's name for the scapula is the collarbone. 99) \_\_\_\_\_

**MATCHING. Choose the item in column 2 that best matches each item in column 1.**

*Match the following:*

- |            |          |            |
|------------|----------|------------|
| 100) Coxal | A) hip   | 100) _____ |
|            | B) thigh |            |

*Match the following.*

- |  |                    |            |
|--|--------------------|------------|
| 101) Responds to stimuli (internal and external) | A) skeletal system | 101) _____ |
|  | B) nervous system  |            |
| 102) Site of hematopoiesis                       |                    | 102) _____ |

*Match the following:*

- |          |  |            |
|----------|--|------------|
| 103) DNA | A) acts as a template during transcription and is synthesized during translation | 103) _____ |
|          | B) acts as a template during transcription                                       |            |

*Match the following:*

- |   |             |            |
|---|-------------|------------|
| 104) Chromosomes move slowly apart toward opposite ends of the cell | A) anaphase | 104) _____ |
|---|-------------|------------|

*Match the following:*

- |                                     |            |            |
|-------------------------------------|------------|------------|
| 105) Articulates with arm bone head | A) scapula | 105) _____ |
|-------------------------------------|------------|------------|

*Match the following:*

- |   |                     |            |
|---|---------------------|------------|
| 106) Area where bone growth takes place | A) epiphyseal plate | 106) _____ |
|   | B) epiphyseal line  |            |

*Match the following:*

- |  |                          |            |
|--|--------------------------|------------|
| 107) A metabolic pathway that produces water, carbon dioxide, and ATP, and provides for a large amount of ATP per glucose because oxygen is used | A) aerobic respiration   | 107) _____ |
|  | B) anaerobic respiration |            |



108) Serves as the actual "go" signal for muscle contraction

A) calcium ions

108) \_\_\_\_\_

B) sodium ions

*Match the following:*

109) Primary sensory cortex

A) parietal lobe

109) \_\_\_\_\_

110) Somatic motor cortex

B) pyramidal tract

110) \_\_\_\_\_

C) frontal lobe

D) corticospinal tract

*Match the following function with its blood cell:*

111) Transport carbon dioxide

A) leukocytes

111) \_\_\_\_\_

B) erythrocytes

*Match the following.*

112) An increase in sympathetic nervous system firing causes cardiac output to

A) increase

112) \_\_\_\_\_

*Identify the digestive organ that is primarily associated with the following digestive function:*

113) Site where starch digestion begins

A) mouth

113) \_\_\_\_\_

B) stomach

*Match the following:*

114) Inferior

A) above

114) \_\_\_\_\_

B) below

*Match the following:*

115) Peroxisomes

A) uses oxygen to detoxify harmful substances

115) \_\_\_\_\_

*Match the following:*

116) Cells that can dissolve the bony matrix

A) osteoclasts

116) \_\_\_\_\_

B) osteons

*Match the following:*

117) Destroys acetylcholine (ACh)

A) enzymes

117) \_\_\_\_\_

B) potassium ions

Match the following:

118) Cerebrospinal fluid is filtered into the ventricles through this

A) choroid plexus

118) \_\_\_\_\_

B) epithalamus

Match the following function with its blood cell:

119) Kill parasitic worms

A) eosinophils

119) \_\_\_\_\_

B) neutrophils

Match the following.

120) An increase in the deposition of saturated fats in the lining of blood vessels causes arterial blood pressure to

A) increase

120) \_\_\_\_\_

Identify the digestive organ that is primarily associated with the following digestive function:

121) Site where pancreatic enzymes and bile enter the alimentary canal

A) duodenum

121) \_\_\_\_\_

B) ileum

Match the following:

122) Lateral

A) toward the side

122) \_\_\_\_\_

B) toward the midline

Match the following:

123) Chromosomes cluster and align at the center of the spindle

A) metaphase

123) \_\_\_\_\_

Match the following:

124) Small channels that radiate through the matrix of bone

A) canaliculi

124) \_\_\_\_\_

B) Sharpey's fibers