## **MULTIPLE CHOICE**

1.	<ul> <li>Which of the following describes anatomy?</li> <li>a. Using devices to investigate parameters such as heart rate and blood pressure</li> <li>b. Investigating human structure via dissections and other methods</li> <li>c. Studying the unusual manner in which an organism responds to painful stimuli</li> <li>d. Examining the physiology of life</li> </ul>						
	ANS: BDIF: MemorizationREF: p. 5TOP: Anatomy and Physiology						
2.	<ul> <li>Systemic anatomy is a term that refers to:</li> <li>a. physiological investigation at a microscopic level.</li> <li>b. anatomical investigation that begins in the head and neck and concludes at the feet.</li> <li>c. anatomical investigation that uses an approach of studying the body by systems—groups of organs having a common function.</li> <li>d. anatomical investigation at the molecular level.</li> </ul>						
	ANS: CDIF: MemorizationREF: p. 5TOP: Anatomy and Physiology						
3.	<ul> <li>Physiology can be subdivided according to the studied.</li> <li>a. type of organism</li> <li>b. organizational level</li> <li>c. systemic function</li> <li>d. All of the above are correct.</li> </ul>						
	ANS: D DIF: Memorization REF: p. 5 TOP: Physiology						
4.	<ul> <li>Physiology:</li> <li>a. recognizes the unchanging (as opposed to the dynamic) nature of things.</li> <li>b. investigates the body's structure.</li> <li>c. is concerned with organisms and does not deal with different levels of organization such as cells and systems.</li> <li>d. is the science that examines the function of living organisms and their parts.</li> </ul>						
	ANS: D DIF: Memorization REF: p. 5 TOP: Physiology						

# 5. *Metabolism* refers to:

- a. the chemical basis of life.
- b. the sum of all the physical and chemical reactions occurring in the body.
- c. an organization of similar cells specialized to perform a certain function.
- d. a subdivision of physiology.

ANS: B	DIF: Application	REF: p. 6	TOP: Characteristics of Life
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6.	<ul> <li>From smallest to largest, the levels of organization of the body are:</li> <li>a. organism, chemical, tissue, cellular, organ, system, organelle.</li> <li>b. chemical, microscopic, cellular, tissue, organ, system, organism.</li> <li>c. organism, system, organ, tissue, cellular, organelle, chemical.</li> <li>d. chemical, organelle, cellular, tissue, organ, system, organism.</li> </ul>						
	ANS: D TOP: Levels of Org		Memorization	REF:	p. 7		
7.	<ul><li>The smallest living</li><li>a. molecules.</li><li>b. cells.</li><li>c. organelles.</li><li>d. atoms.</li></ul>	units c	f structure and function in the bod	ly are:			
	ANS: B TOP: Levels of Org		Memorization	REF:	p. 8		
8.	<ul> <li>An organization of called a(n):</li> <li>a. tissue.</li> <li>b. organism.</li> <li>c. system.</li> <li>d. organ.</li> </ul>	many s	similar cells that are specialized to	perfor	m a certain function is		
	ANS: A TOP: Tissue Level	DIF:	Memorization	REF:	p. 8		
9.	<ul><li>An organ is one organ.</li><li>a. system.</li><li>b. cell.</li><li>c. organelle.</li><li>d. tissue.</li></ul>	ganizati	ional step lower than a(n):				
	ANS: A TOP: Organ Level	DIF:	Memorization	REF:	p. 8		
10.	<ul><li>The reproductive sy</li><li>a. testes.</li><li>b. ovaries.</li><li>c. ureter.</li><li>d. penis.</li></ul>	ystem i	ncludes all of the following excep	t the:			
	ANS: C TOP: Body Systems	DIF:	Memorization	REF:	p. 9		
11.	<ul><li>The lungs are locate</li><li>a. thoracic cavity.</li><li>b. mediastinum.</li><li>c. abdominal cavit</li><li>d. cranial cavity.</li></ul>		ie:				
	ANS: A	DIF:	Memorization	REF:	p. 10		

TOP: Body Cavities

	5		
12.	<ul><li>The mediastinum contains</li><li>a. trachea.</li><li>b. venae cavae.</li><li>c. right lung.</li><li>d. esophagus.</li></ul>	all of the following except the:	
	ANS: C DIF: TOP: Body Cavities	Memorization	REF: p. 10
13.	<ul><li>The gallbladder lies in the</li><li>a. abdominal cavity.</li><li>b. pelvic cavity.</li><li>c. dorsal cavity.</li><li>d. mediastinum.</li></ul>	:	
	ANS: A DIF: TOP: Body Cavities	Memorization	REF: p.11
14.	<ul><li>The number of abdominal</li><li>a. three.</li><li>b. five.</li><li>c. seven.</li><li>d. nine.</li></ul>	regions is:	
	ANS: D DIF: TOP: Abdominal Regions	Memorization	REF: p. 13
15.	<ul><li>The abdominal region in v</li><li>a. hypogastric.</li><li>b. epigastric.</li><li>c. right lumbar.</li><li>d. left iliac.</li></ul>	which the urinary bladder is found	is the:
	ANS: A DIF: TOP: Abdominal Regions	Memorization	REF: p. 14
16.	<ul><li>A surgeon removing a gal</li><li>a. right lumbar</li><li>b. right hypochondriac</li><li>c. hypogastric</li><li>d. umbilical</li></ul>	lbladder should know to find it in	the region.
	ANS: B DIF: TOP: Abdominal Regions	Memorization	REF: p. 14
17.	The abdominal region in v a. hypogastric. b. right iliac.	which the appendix is found is the	:

- c. right lumbar.d. right hypochondriac.

	ANS: A DIF: TOP: Abdominal Regions	Memorization	REF: p. 14
18.	<ul><li><i>Popliteal</i> refers to the:</li><li>a. calf.</li><li>b. ankle.</li><li>c. cheek.</li><li>d. area behind the knee.</li></ul>		
	ANS: D DIF: TOP: Descriptive Terms for	Memorization r Body Regions	REF: p. 13
19.	<ul><li>A plane through the body</li><li>a. sagittal.</li><li>b. frontal.</li><li>c. coronal.</li><li>d. transverse.</li></ul>	that divides the body into right an	d left sides is called:
	ANS: A DIF: TOP: Body Planes and Sec	Memorization tions	REF: p. 16
20.	<ul><li>The abdominal quadrants</li><li>a. Umbilicus</li><li>b. Pubic bone</li><li>c. Xiphoid process</li><li>d. Iliac crest</li></ul>	are located with what structure as	their midpoint?
	ANS: A DIF: TOP: Abdominopelvic Qua	Memorization adrants	REF: p. 14
21.	<ul> <li>Humans have similar righ of:</li> <li>a. anatomical position.</li> <li>b. anterior symmetry.</li> <li>c. ipsilateral position.</li> <li>d. bilateral symmetry.</li> </ul>	t and left sides of the body, at leas	t superficially. This is an example
	ANS: D DIF: TOP: Anatomical Position	Memorization	REF: p. 9
22.	<ul><li>Two major cavities of the</li><li>a. ventral/dorsal.</li><li>b. inferior/superior.</li><li>c. visceral/parietal.</li><li>d. axial/appendicular.</li></ul>	human body are:	
	ANS: A DIF: TOP: Body Cavities	Memorization	REF: p. 10
23.	The dorsal cavity contains a. brain. b. spinal column.	all of the following except the:	

b. spinal column.c. spinal cord.

	d. thyroid gland.				
	ANS: D TOP: Body Cavitie		Memorization	REF:	p. 11
24.	<ul><li>A plane through th</li><li>a. sagittal.</li><li>b. median.</li><li>c. coronal.</li><li>d. transverse.</li></ul>	ne body	that divides the body into anteri	or and po	osterior portions is:
	ANS: C TOP: Body Planes		Memorization tions	REF:	p. 16
25.	The plane that div a. sagittal b. frontal c. transverse d. superficial	ides the	body into upper and lower parts	s is the	plane.
	ANS: C TOP: Body Planes		Memorization tions	REF:	p. 16
26.	<ul><li>A somatotype cha</li><li>a. endomorph.</li><li>b. mesomorph.</li><li>c. ectomorph.</li><li>d. None of the ab</li></ul>		ed by having a muscular physiqu correct.	ie is calle	ed a(n):
	ANS: B	DIF:	Application REF: p. 18	TOP:	Body Type and Disease
27.	<ul><li>A somatotype cha</li><li>a. ectomorph.</li><li>b. mesomorph.</li><li>c. endomorph.</li></ul>	racteriz	ed by a thin, fragile physique is a	a(n):	
	ANS: A TOP: Body Type a		Memorization ase	REF:	p. 18
28.	<ul><li>The abdominopely</li><li>a. kidneys.</li><li>b. gallbladder.</li><li>c. right lung.</li><li>d. urinary bladder</li></ul>		ty contains all of the following e	xcept the	:
	ANS: C TOP: Body Cavitie		Memorization	REF:	p. 11
29.	<ul><li>Which of the follo</li><li>a. Digestion</li><li>b. Balance</li><li>c. Conductivity</li><li>d. Circulation</li></ul>	owing is	not one of the characteristics of	life?	

	e. Reproduction		
	ANS: B DIF: Memorization TOP: Characteristics of Life	REF:	p. 6
30.	<ul> <li>An idea that is supported by repeated experiments and obser</li> <li>a. fact.</li> <li>b. theory.</li> <li>c. concept.</li> <li>d. hypothesis.</li> </ul>	rvation	is called a:
	ANS: B DIF: Memorization TOP: Science and Society	REF:	p. 4
31.	<ul> <li>Molecules are:</li> <li>a. atoms combined to form larger chemical aggregates.</li> <li>b. electrons orbiting nuclei.</li> <li>c. a complex of electrons arranged in concentric shells.</li> <li>d. composed of cellular organelles.</li> </ul>		
	ANS: A DIF: Memorization TOP: Chemical Level: Basis for Life	REF:	p. 7
32.	<ul> <li>Mitochondria, Golgi apparatus, and endoplasmic reticulum</li> <li>a. molecules.</li> <li>b. cytoplasm.</li> <li>c. organelles.</li> <li>d. plasma membranes.</li> </ul>	are exa	imples of:
	ANS: C DIF: Memorization TOP: Levels of Organization	REF:	p. 8
33.	<ul><li>When many similar cells specialize to perform a certain fun</li><li>a. tissue.</li><li>b. organelle.</li><li>c. organ system complex.</li><li>d. organism.</li></ul>	ction, i	t is referred to as a(n):
	ANS: ADIF:MemorizationTOP:Tissue Level	REF:	p. 8
34.	<ul> <li>Several kinds of tissues working together are termed a(n):</li> <li>a. plasma membrane.</li> <li>b. organ.</li> <li>c. organism.</li> <li>d. organ system.</li> </ul>		
	ANS: B DIF: Memorization TOP: Organ Level	REF:	p. 8
35.	Blood production is a function of which system? a. Reproductive		

b. Respiratory

	<ul><li>c. Skeletal</li><li>d. Lymphatic</li></ul>		
	ANS: C DIF: Memorization TOP: Support and Movement	REF:	p. 9
36.	<ul><li>The dorsal body cavity contains the:</li><li>a. brain and spinal cord.</li><li>b. heart and lungs.</li><li>c. reproductive organs.</li><li>d. digestive organs.</li></ul>		
	ANS: A DIF: Memorization TOP: Body Cavities	REF:	p. 11
37.	<ul><li>The ventral body cavity contains the:</li><li>a. thoracic and abdominopelvic cavities.</li><li>b. heart and lungs only.</li><li>c. digestive and reproductive organs.</li><li>d. brain and spinal cord.</li></ul>		
	ANS: A DIF: Memorization TOP: Body Cavities	REF:	p. 10
38.	<ul><li>The axial portion of the body consists of the:</li><li>a. arms, neck, and legs.</li><li>b. neck, torso, and arms.</li><li>c. torso, arms, legs, and head.</li><li>d. head, neck, and torso.</li></ul>		
	ANS: D DIF: Memorization TOP: Body Regions	REF:	p. 12
39.	<ul><li>The abdominopelvic cavity contains all of the following exc.</li><li>a. stomach.</li><li>b. pancreas.</li><li>c. heart.</li><li>d. reproductive organs.</li></ul>	ept the	c
	ANS: C DIF: Memorization TOP: Body Cavities	REF:	p. 11
40.	<ul> <li>Visceral peritoneum would cover which of the following organ.</li> <li>a. Heart</li> <li>b. Intestines</li> <li>c. Lungs</li> <li>d. Spinal cord</li> </ul>	gans?	
	ANS: B DIF: Memorization TOP: Body Cavities	REF:	p. 11
41.	A sagittal section divides the body into portions.		

a. upper and lower

	<ul> <li>b. right and left</li> <li>c. front and back</li> <li>d. proximal and distal</li> <li>ANS: B DIF: Memorization</li> <li>TOP: Body Planes and Sections</li> </ul>	REF: p. 16
42.	<ul> <li>A frontal section divides the body into portions.</li> <li>a. upper and lower</li> <li>b. right and left</li> <li>c. front and back</li> <li>d. cortex and medullary</li> </ul>	
	ANS: C DIF: Memorization TOP: Body Planes and Sections	REF: p. 16
43.	<ul> <li>Axilla is a term referring to which body region?</li> <li>a. Anterior elbow</li> <li>b. Armpit</li> <li>c. Posterior knee</li> <li>d. Groin</li> </ul>	
	ANS: B DIF: Memorization TOP: Descriptive Terms for Body Regions	REF: p. 13
44.	The tissue is not a major tissue of the body. a. cutaneous b. epithelial c. connective d. nervous	
	ANS: A DIF: Memorization TOP: Tissue Level	REF: p. 8
45.	<ul><li>"Apple-shaped" and "pear-shaped" usually describe su</li><li>a. Mesomorph</li><li>b. Ectomorph</li><li>c. Endomorph</li><li>d. Polymorph</li></ul>	btypes of what major body type?
	ANS:CDIF:MemorizationTOP:Body Type and Disease	REF: p. 18
46.	<ul> <li>An organ is one organizational step higher than a(n):</li> <li>a. system.</li> <li>b. cell.</li> <li>c. organelle.</li> <li>d. tissue.</li> </ul>	
	ANS: D DIF: Memorization TOP: Organ Level	REF: p. 8

47. Which of the following does not describe anatomical position?

	<ul> <li>a. Head pointing forward</li> <li>b. Body standing erect</li> <li>c. Arms extended from the shoulders, palms up</li> <li>d. All of the above describe the body in the anatomical position.</li> </ul>
	ANS: CDIF:MemorizationREF:p. 9TOP:Anatomical Position
48.	<ul> <li>Someone studying gross anatomy would not study which of the following?</li> <li>a. The location of the heart and chambers of the heart</li> <li>b. Muscles of the arms and legs</li> <li>c. The nucleus of the cell</li> <li>d. All of the above would be studied.</li> </ul>
	ANS: C DIF: Memorization REF: p. 5 TOP: Anatomy
49.	<ul> <li>The parietal pleura covers the:</li> <li>a. lungs.</li> <li>b. heart.</li> <li>c. walls of the thoracic cavity.</li> <li>d. Both A and B are correct.</li> </ul>
	ANS: C DIF: Memorization REF: p. 11 TOP: Body Cavities
50.	<ul> <li>The hollow part of an organ or body structure is called the of the organ.</li> <li>a. cortical part</li> <li>b. lumen</li> <li>c. medullary part</li> <li>d. apical part</li> </ul>
	ANS: BDIF: MemorizationREF: p. 15TOP: Terms Related to Organs
51.	<ul> <li>The narrowest part of an organ or body structure is called the of the organ.</li> <li>a. cortical part</li> <li>b. lumen</li> <li>c. medullary part</li> <li>d. apical part</li> </ul>
	ANS: DDIF: MemorizationREF: p. 15TOP: Terms Related to Organs
52.	<ul> <li>Which of the following is not a directional term of the body?</li> <li>a. Apical</li> <li>b. Proximal</li> <li>c. Superficial</li> <li>d. Deep</li> </ul>
	ANS: DDIF: MemorizationREF: p. 15TOP: Terms Related to Organs

53. What is the anatomical direction term that means *nearer the surface*?

- a. Deep
- b. Distal
- c. Proximal
- d. Superficial

ANS: D DIF: Application REF: p. 15 TOP: Directional Terms

54. An x-ray technician has been asked to make x-ray films of the liver. Which of the abdominopelvic regions must be included?

- a. Right hypochondriac, epigastric, and left hypochondriac
- b. 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: p. 13 TOP: Abdominal Regions

- 55. 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: p. 9 TOP: Anatomical Position

- 56. 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: p. 18 TOP: Body Type and Disease

- 57. 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: p. 15 TOP: Directional Terms

- 58. The study of microscopic anatomy might include:
  - a. systemic anatomy.

	<ul><li>b. cytology.</li><li>c. histology.</li><li>d. both B and C.</li></ul>		
	ANS: D DIF: Memorization TOP: Anatomy and Physiology	REF:	p. 5
59.	<ul><li>The structure that is called the "powerhouse"</li><li>a. cytoplasm.</li><li>b. endoplasmic reticulum.</li><li>c. mitochondria.</li><li>d. Golgi apparatus.</li></ul>	of the cell is the:	
	ANS: C DIF: Memorization TOP: Levels of Organization	REF:	p. 8
60.	How many main tissue types are found in the a. 4 b. 8 c. 11 d. 6	e human body?	
	ANS: A DIF: Memorization TOP: Levels of Organization	REF:	p. 8
61.	The mediastinum is located in the cav a. dorsal b. abdominal c. ventral d. Both B and C are correct.	ity.	
	ANS: C DIF: Application REF	: p. 10 TOP:	Body Cavities
62.	<ul> <li>Another term for <i>posterior</i> is:</li> <li>a. ventral.</li> <li>b. dorsal.</li> <li>c. inferior.</li> <li>d. proximal.</li> </ul>		
	ANS: B DIF: Memorization TOP: Directional Terms	REF:	p. 14
63.	<ul><li>The term most nearly opposite <i>cortical</i> woul</li><li>a. peripheral.</li><li>b. apical.</li><li>c. medullary.</li><li>d. basal.</li></ul>	d be:	
	ANS: C DIF: Memorization TOP: Terms Related to Organs	REF:	p. 15
64.	Withdrawing from a painful stimulus is an exa. excretion.	xample of:	

a. excretion.

- b. growth.
- c. responsiveness.
- d. secretion.

ANS: C DIF: Application REF: p. 6

TOP: Characteristics of Life

#### MATCHING

Match each organ to its corresponding system.

- a. Respiratory
- b. Digestive
- c. Urinary
- d. Reproductive
- e. Endocrine
- f. Cardiovascular
- g. Integumentary
- h. Muscular
- i. Skeletal
- j. Nervous
- 1. Tendons
- 2. Pituitary gland
- 3. Skin
- 4. Capillaries
- 5. Ligaments
- 6. Spinal cord
- 7. Bronchial tree
- 8. Testes and ovaries
- 9. Large and small intestines
- 10. Ureters

1.		Н		Memorization	REF:	p. 9
		Body Systems				
2.		E		Memorization	REF:	p. 9
		Body Systems				
3.		G		Memorization	REF:	p. 9
		Body Systems				
4.		F		Memorization	REF:	p. 9
		Body Systems				
5.		Ι		Memorization	REF:	p. 9
		Body Systems				
6.		J		Memorization	REF:	p. 9
		Body Systems				
7.		Α		Memorization	REF:	p. 9
		Body Systems				
8.		D		Memorization	REF:	p. 9
		Body Systems				
9.				Memorization	REF:	p. 9
10.	ANS:	С	DIF:	Memorization	REF:	p. 9
	ANS: TOP:	B B Body Systems C	DIF:		REF: REF:	-

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.				Memorization	REF:	p. 13
	TOP:	Body Regions				
12.	ANS:	В	DIF:	Memorization	REF:	p. 13
	TOP:	Body Regions				
13.	ANS:	А	DIF:	Memorization	REF:	p. 13
	TOP:	Body Regions				
14.	ANS:	Η	DIF:	Memorization	REF:	p. 13
	TOP:	Body Regions				
15.	ANS:	F	DIF:	Memorization	REF:	p. 13
	TOP:	Body Regions				
16.	ANS:	D	DIF:	Memorization	REF:	p. 13
	TOP:	Body Regions				
17.	ANS:	Е	DIF:	Memorization	REF:	p. 13
	TOP:	Body Regions				
18.	ANS:	С	DIF:	Memorization	REF:	p. 13
	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: p. 15
	TOP:	Directional Terms		
20.	ANS:	I DIF:	Memorization	REF: p. 14
	TOP:	Directional Terms		
21.	ANS:	D DIF:	Memorization	REF: p. 15
	TOP:	Directional Terms		
22.	ANS:	H DIF:	Memorization	REF: p. 14
	TOP:	Directional Terms		
23.	ANS:	B DIF:	Memorization	REF: p. 14
	TOP:	Directional Terms		
24.	ANS:	A DIF:	Memorization	REF: p. 14
	TOP:	Directional Terms		
25.	ANS:	C DIF:	Memorization	REF: p. 14
	TOP:	Directional Terms		
26.	ANS:	G DIF:	Memorization	REF: p. 15
	TOP:	Directional Terms		
27.	ANS:	F DIF:	Memorization	REF: p. 14
	TOP:	Directional Terms		

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

- a. Reproduction and development
- b. Processing, regulation, and maintenance
- c. Outer protection
- d. Support and movement
- e. Communication, control, and 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

REF: p. 9
REF: p. 9
REF: p. 9
REF: p. 9

	TOP:	Body Systems				
32.	ANS:	А	DIF:	Memorization	REF:	p. 9
	TOP:	Body Systems				
33.	ANS:	С	DIF:	Memorization	REF:	p. 9
	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: p.6			
	TOP:	Characteristics of Li	Characteristics of Life				
35.	ANS:	F DIF:	Memorization	REF: p. 6			
	TOP:	Characteristics of Li	fe	-			
36.	ANS:	I DIF:	Memorization	REF: p. 6			
	TOP:	Characteristics of Li	fe				
37.	ANS:	A DIF:	Memorization	REF: p. 6			
	TOP:	Characteristics of Li	fe				
38.	ANS:	D DIF:	Memorization	REF: p. 6			
		Characteristics of Li					
39.	ANS:	B DIF:	Memorization	REF: p. 6			
	TOP:	Characteristics of Life					
40.	ANS:	C DIF:	Memorization	REF: p. 6			
	TOP:	Characteristics of Life					
41.	ANS:	E DIF:	Memorization	REF: p. 6			
	TOP:	Characteristics of Li	fe				
42.	ANS:	J DIF:	Memorization	REF: p. 6			
	TOP:	Characteristics of Life					
43.	ANS:	G DIF:	Memorization	REF: p. 6			

#### TOP: Characteristics of Life

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

- a. Medullary
- b. Basal
- c. Apical
- d. Cortical
- e. Lumen
- 44. Base or widest part of the organ
- 45. Outer region or layer of an organ
- 46. Hollow part of an organ or tube of the body
- 47. Inner region of an organ
- 48. Narrow part or point of an organ

44.	ANS:	В	DIF:	Memorization	REF: p. 15	
	TOP:	Terms Related	to Org	ans		
45.	ANS:	D	DIF:	Memorization	REF: p. 15	
	TOP:	Terms Related	to Org	ans		
46.	ANS:	E	DIF:	Memorization	REF: p. 15	
	TOP:	: Terms Related to Organs				
47.	ANS:	А	DIF:	Memorization	REF: p. 15	
	TOP:	Terms Related	to Org	ans		
48.	ANS:	С	DIF:	Memorization	REF: p. 15	
	TOP:	Terms Related	to Org	ans		

# Match each level of organization with its description.

- a. Chemical
- b. Organelle
- c. Cellular
- d. Tissue
- e. Organ
- f. System
- g. Organism
- 49. Highest level of organization
- 50. Includes mitochondria
- 51. Composed of the smallest structure that possesses the basic characteristics of living matter
- 52. Level at which the tissues work together to perform a specific function
- 53. Composed of macromolecules
- 54. Cells working together to perform a specific function
- 55. Level at which a group of organs work together to perform specific complex functions

49.	ANS:	G DIF:	Memorization	REF: p. 9	
	TOP:	Levels of Organization	on		
50.	ANS:	B DIF:	Memorization	REF: p. 8	
	TOP:	Levels of Organization	on		
51.	ANS:	C DIF:	Memorization	REF: p. 7	
	TOP: Levels of Organization				
52.	ANS:	E DIF:	Memorization	REF: p. 8	

	TOP:	Levels of Organization			
53.	ANS:	А	DIF:	Memorization	REF: p. 7
	TOP:	Levels of Orga	nizatio	on	
54.	ANS:	D	DIF:	Memorization	REF: p. 8
	TOP:	Levels of Orga	nizatio	n	
55.	ANS:	F	DIF:	Memorization	REF: p. 8
	TOP:	Levels of Orga	nizatio	on	

#### OTHER

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

ANS: Answers will vary.

DIF: Application REF: p. 6 TOP: Characteristics of Life

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

ANS: Answers will vary.

DIF: Application REF: p. 17 TOP: Interaction of Structure and Function

3. 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: p. 4 TOP: Science and Society

- 4. Describe the levels of organization from chemical to system.
  - ANS: Answers will vary.
  - DIF: Memorization REF: p. 8 TOP: Levels of Organization
- 5. Describe anatomical position. Give examples of structures that are ipsilateral and contralateral to each other.

ANS: Answers will vary. DIF: Application REF: p. 9 TOP: Anatomical Position

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

ANS:

Answers will vary.

DIF: Application REF: p. 14 TOP: Directional Terms