

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

- 1) What is a vertical section through the body, dividing it into anterior and posterior regions called? 1) \_\_\_\_\_  
A) transverse                      B) sagittal                      C) median                      D) frontal

Answer: D

- Explanation: A)  
B)  
C)  
D)

- 2) One of the functional characteristics of life is irritability. This refers to \_\_\_\_\_. 2) \_\_\_\_\_  
A) the nervous system causing all living things to sometimes experience anger  
B) sensing changes in the environment and then reacting or responding to them  
C) the necessity for all organisms to reproduce  
D) indigestible food residues stimulating the excretory system

Answer: B

- Explanation: A)  
B)  
C)  
D)

- 3) Which of the following describes a parasagittal plane? 3) \_\_\_\_\_  
A) two cuts dividing the body into left and right halves  
B) a transverse cut just above the knees  
C) any sagittal plane except the median  
D) any cut dividing the body into anterior and posterior

Answer: C

- Explanation: A)  
B)  
C)  
D)

- 4) Which one of the following systems responds to environmental stimuli? 4) \_\_\_\_\_  
A) nervous                      B) lymphatic                      C) immune                      D) muscular

Answer: A

- Explanation: A)  
B)  
C)  
D)

- 5) The cavities housing the eyes are called \_\_\_\_\_ cavities. 5) \_\_\_\_\_  
A) cranial                      B) nasal                      C) orbital                      D) frontal

Answer: C

- Explanation: A)  
B)  
C)  
D)

6) If you consider your home air conditioner in terms of homeostasis, then the wall thermostat would be the \_\_\_\_\_. 6) \_\_\_\_\_  
A) control center      B) effector      C) receptor      D) variable

Answer: A  
Explanation: A)  
                  B)  
                  C)  
                  D)

7) The dorsal body cavity is the site of which of the following? 7) \_\_\_\_\_  
A) intestines      B) liver      C) lungs      D) brain

Answer: D  
Explanation: A)  
                  B)  
                  C)  
                  D)

8) Choose the anatomical topic and definition that is *not* correctly matched. 8) \_\_\_\_\_  
A) Cytology: study of the structures in a particular region.  
B) Gross anatomy: study of structures visible to the eye.  
C) Embryology: study of the changes in an individual from conception to birth.  
D) Microscopic anatomy: study of structures too small to be seen by the naked eye.

Answer: A  
Explanation: A)  
                  B)  
                  C)  
                  D)

9) The term *pollex* refers to the \_\_\_\_\_. 9) \_\_\_\_\_  
A) calf      B) thumb      C) fingers      D) great toe

Answer: B  
Explanation: A)  
                  B)  
                  C)  
                  D)

10) The study of the heart may incorporate many aspects of anatomy but as a whole you would say it is \_\_\_\_\_ anatomy. 10) \_\_\_\_\_  
A) developmental      B) microscopic      C) systemic      D) gross

Answer: D  
Explanation: A)  
                  B)  
                  C)  
                  D)

- 11) What is the posterior side of the patella called? 11) \_\_\_\_\_  
A) popliteal                      B) crural                      C) antecubital                      D) sural  
Answer: A  
Explanation: A)  
                    B)  
                    C)  
                    D)
- 12) Which of these is *not* part of the dorsal cavity? 12) \_\_\_\_\_  
A) cranial cavity                      B) spinal cord                      C) thoracic cavity                      D) vertebral cavity  
Answer: C  
Explanation: A)  
                    B)  
                    C)  
                    D)
- 13) An increased rate of breathing as a result of an increased buildup of carbon dioxide in the bloodstream would be best described as an example of \_\_\_\_\_. 13) \_\_\_\_\_  
A) metabolism                      B) responsiveness  
C) maintaining boundaries                      D) excretion of metabolic waste  
Answer: D  
Explanation: A)  
                    B)  
                    C)  
                    D)
- 14) The anatomical position is used \_\_\_\_\_. 14) \_\_\_\_\_  
A) only when a body is lying down  
B) rarely, because people don't usually assume this position  
C) as a standard reference point for directional terms regardless of the actual position of the body  
D) as the most comfortable way to stand when dissecting a specimen  
Answer: C  
Explanation: A)  
                    B)  
                    C)  
                    D)
- 15) Which of the following organs or structures would be found in the left iliac region? 15) \_\_\_\_\_  
A) stomach                      B) appendix                      C) liver                      D) intestines  
Answer: D  
Explanation: A)  
                    B)  
                    C)  
                    D)

16) An oblique cut is one that is cut \_\_\_\_\_. 16) \_\_\_\_\_  
A) vertical right and left  
B) perpendicular to vertical and horizontal  
C) horizontal right and left  
D) diagonally between the vertical and horizontal

Answer: D

Explanation: A)  
B)  
C)  
D)

17) What is the specific name for the hip region? 17) \_\_\_\_\_  
A) coxal B) manus C) pedal D) inguinal

Answer: A

Explanation: A)  
B)  
C)  
D)

18) Which of the following describes the operation of the heart and blood vessels? 18) \_\_\_\_\_  
A) systemic anatomy B) cardiovascular physiology  
C) systemic physiology D) cardiovascular anatomy

Answer: D

Explanation: A)  
B)  
C)  
D)

19) Choose the following statement that is *not* completely correct regarding serous membranes. 19) \_\_\_\_\_  
A) Serous membranes are divided into parietal and visceral membranes with a potential space between the two.  
B) Visceral pericardium covers the surface of the heart, and parietal pericardium lines the walls of the heart.  
C) Serous membranes secrete a watery lubricating fluid.  
D) Serosa are very thin, double-layered structures.

Answer: B

Explanation: A)  
B)  
C)  
D)

20) The single most abundant chemical substance of the body, accounting for 60% to 80% of body weight, is \_\_\_\_\_. 20) \_\_\_\_\_  
A) protein B) oxygen C) water D) hydrogen

Answer: C

Explanation: A)  
B)  
C)  
D)

21) What is the main, general purpose of negative feedback? 21) \_\_\_\_\_  
A) to regulate excretion B) to maintain homeostasis  
C) to control all body system tissues D) to keep the body's sugar high

Answer: B

Explanation: A)  
B)  
C)  
D)

22) Homeostasis is the condition in which the body maintains \_\_\_\_\_. 22) \_\_\_\_\_  
A) a relatively stable internal environment, within limits  
B) a dynamic state within an unlimited range  
C) the lowest possible energy usage  
D) a static state with no deviation from preset points

Answer: A

Explanation: A)  
B)  
C)  
D)

23) Which body cavity protects the nervous system? 23) \_\_\_\_\_  
A) dorsal B) cranial C) thoracic D) vertebral

Answer: A

Explanation: A)  
B)  
C)  
D)

24) \_\_\_\_\_ cavities are spaces within joints. 24) \_\_\_\_\_  
A) Orbital B) Oral C) Synovial D) Nasal

Answer: C

Explanation: A)  
B)  
C)  
D)

25) Which of the following imaging devices would best localize a tumor in a person's brain? 25) \_\_\_\_\_  
A) DSA B) MRI C) X ray D) PET

Answer: B

Explanation: A)  
B)  
C)  
D)

26) A structure that is composed of two or more tissues would be a(n) \_\_\_\_\_. 26) \_\_\_\_\_  
A) organ system B) complex tissue C) organ D) complex cell

Answer: C

Explanation: A)  
B)  
C)  
D)

27) Average body temperature is \_\_\_\_\_ degrees centigrade. 27) \_\_\_\_\_  
A) 68 B) 47 C) 37 D) 98

Answer: C

Explanation: A)  
B)  
C)  
D)

28) The parietal pleural would represent a serous membrane \_\_\_\_\_. 28) \_\_\_\_\_  
A) covering individual lungs B) covering the heart  
C) lining the thoracic cavity D) lining the abdominal cavity

Answer: C

Explanation: A)  
B)  
C)  
D)

29) A good example of a positive feedback mechanism would be \_\_\_\_\_. 29) \_\_\_\_\_  
A) regulating glucose levels in the blood B) enhancement of labor contractions  
C) body temperature regulation D) blood calcium level regulation

Answer: B

Explanation: A)  
B)  
C)  
D)

30) Place the following in correct sequence from simplest to most complex: 30) \_\_\_\_\_

1. molecules
2. atoms
3. tissues
4. cells
5. organ

A) 2-1-3-4-5 B) 1-2-4-3-5 C) 2-1-4-3-5 D) 1-2-3-4-5

Answer: C

Explanation: A)  
B)  
C)  
D)

31) Select the most correct statement. 31) \_\_\_\_\_

- A) Organ systems operate independently of each other to maintain life.
- B) The endocrine system is not a true structural organ system.
- C) The immune system is closely associated with the lymphatic system.
- D) Organ systems can be composed of cells or tissues, but not both.

Answer: C

Explanation: A)  
B)  
C)  
D)

32) Which of the following statements is the most correct regarding homeostatic imbalance? 32) \_\_\_\_\_  
A) Positive feedback mechanisms are overwhelmed.  
B) Negative feedback mechanisms are functioning normally.  
C) It is considered the cause of most diseases.  
D) The internal environment is becoming more stable.

Answer: C

Explanation: A)  
B)  
C)  
D)

33) What is a vertical section through the body, dividing it into left and right, called? 33) \_\_\_\_\_  
A) regional                      B) transverse                      C) sagittal                      D) frontal

Answer: C

Explanation: A)  
B)  
C)  
D)

34) The heart lies in the \_\_\_\_\_ cavity. 34) \_\_\_\_\_  
A) pericardial                      B) superior mediastinal  
C) pleural                      D) dorsal

Answer: A

Explanation: A)  
B)  
C)  
D)

35) Which of the following would *not* be a functional characteristic of life? 35) \_\_\_\_\_  
A) maintenance of boundaries                      B) responsiveness to external stimuli  
C) decay                      D) movement

Answer: C

Explanation: A)  
B)  
C)  
D)

36) Histology would be best defined as a study of \_\_\_\_\_. 36) \_\_\_\_\_  
A) cells                      B) cell chemistry  
C) the gross structures of the body                      D) tissues

Answer: D

Explanation: A)  
B)  
C)  
D)

- 37) Which of the following are survival needs of the body? 37) \_\_\_\_\_  
A) nutrients, water, growth, and reproduction  
B) nutrients, water, atmospheric pressure, and oxygen  
C) nutrients, water, movement, and reproduction  
D) water, atmospheric pressure, growth, and movement

Answer: B

Explanation: A)  
B)  
C)  
D)

- 38) The anatomical position is characterized by all of the following *except* \_\_\_\_\_. 38) \_\_\_\_\_  
A) palms turned posteriorly B) body erect  
C) thumbs pointed laterally D) arms at sides

Answer: A

Explanation: A)  
B)  
C)  
D)

- 39) Which of the following statements is true concerning feedback mechanisms? 39) \_\_\_\_\_  
A) Negative feedback mechanisms work to prevent sudden severe changes within the body.  
B) Positive feedback mechanisms always result in excessive damage to the host.  
C) Blood glucose levels are regulated by positive feedback mechanisms.  
D) Negative feedback mechanisms tend to increase the original stimulus.

Answer: A

Explanation: A)  
B)  
C)  
D)

- 40) In which cavities are the lungs located? 40) \_\_\_\_\_  
A) mediastinum, thoracic, and ventral B) pleural, ventral, and thoracic  
C) pleural, dorsal, and abdominal D) pericardial, ventral, and thoracic

Answer: B

Explanation: A)  
B)  
C)  
D)

- 41) Subdivisions of anatomy include which of the following? 41) \_\_\_\_\_  
A) gross, macroscopic, visual, and microscopic  
B) regional, surface, visual, and microscopic  
C) gross, regional, dissection, and surface  
D) gross, regional, systemic, and surface

Answer: D

Explanation: A)  
B)  
C)  
D)

42) In which abdominopelvic cavity is the stomach located? 42) \_\_\_\_\_  
A) left lower                      B) left upper                      C) right lower                      D) right upper

Answer: B

Explanation: A)  
                  B)  
                  C)  
                  D)

43) Which term means toward or at the back of the body, behind? 43) \_\_\_\_\_  
A) lateral                              B) distal                              C) dorsal                              D) anterior

Answer: C

Explanation: A)  
                  B)  
                  C)  
                  D)

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

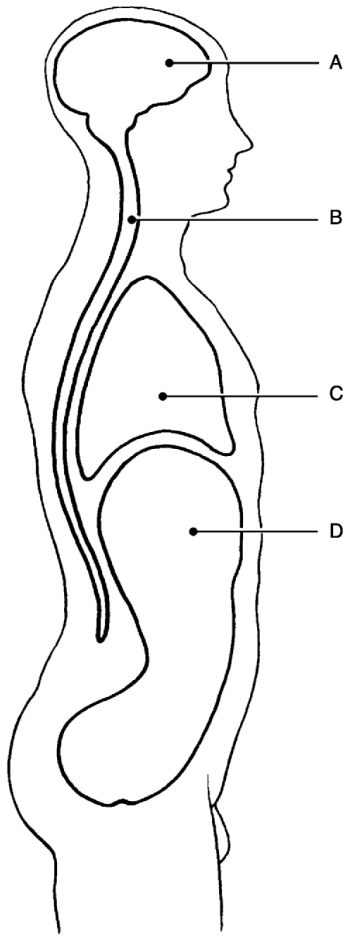


Figure 1.1

Using Figure 1.1, match the following cavities:

44) Vertebral cavity.

44) \_\_\_\_\_

Answer: B

Explanation:

45) What type of homeostatic feedback reflex is the withdrawal reflex?

45) \_\_\_\_\_

Answer: negative

Explanation:

46) Why is anatomical terminology necessary?

46) \_\_\_\_\_

Answer: Anatomical terms are precise words that have limited usage, which prevents confusion when describing the location of body parts.

Explanation:

47) The term that describes the heel region is \_\_\_\_\_.

47) \_\_\_\_\_

Answer: calcaneal

Explanation:

48) Why are the abdominopelvic cavity organs the most vulnerable in an automobile accident? 48) \_\_\_\_\_

Answer: The walls of the abdominal cavity are formed only by trunk muscles and are not reinforced by bone. The pelvic organs receive a somewhat greater degree of protection from the bony pelvis.

Explanation:

49) What is the function of the serous membranes? 49) \_\_\_\_\_

Answer: They act to reduce friction and allow the organs to slide across cavity walls.

Explanation:

50) The elbow is \_\_\_\_\_ to the wrist. 50) \_\_\_\_\_

Answer: proximal

Explanation:

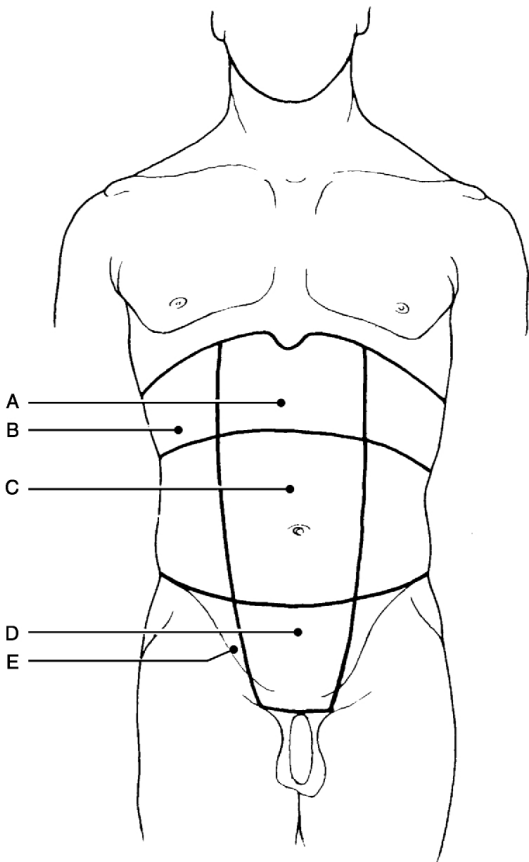


Figure 1.2

Using Figure 1.2, match the following regions:

51) Epigastric region. 51) \_\_\_\_\_

Answer: A

Explanation:

52) The \_\_\_\_\_ cavity contains tiny bones that transmit sound vibrations to the organ of hearing in the inner ear.

52) \_\_\_\_\_

Answer: middle ear

Explanation:

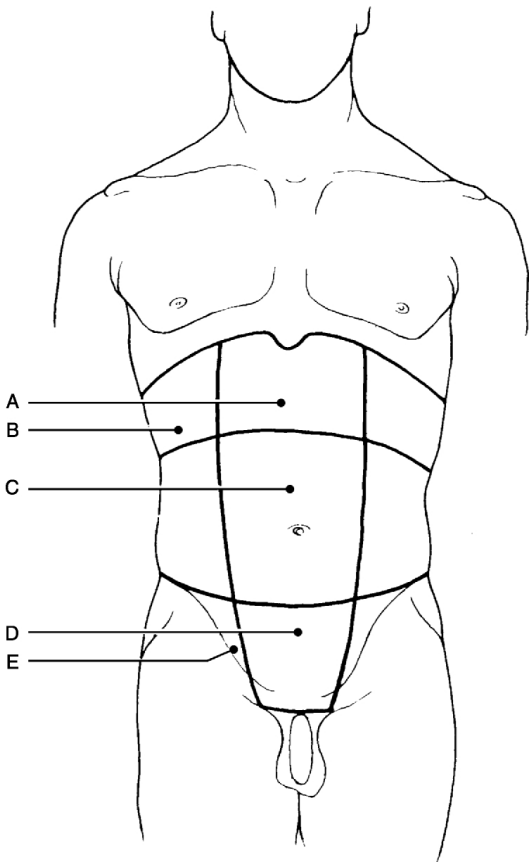


Figure 1.2

Using Figure 1.2, match the following regions:

53) Right iliac (inguinal) region.

53) \_\_\_\_\_

Answer: E

Explanation:

54) Umbilical region.

54) \_\_\_\_\_

Answer: C

Explanation:

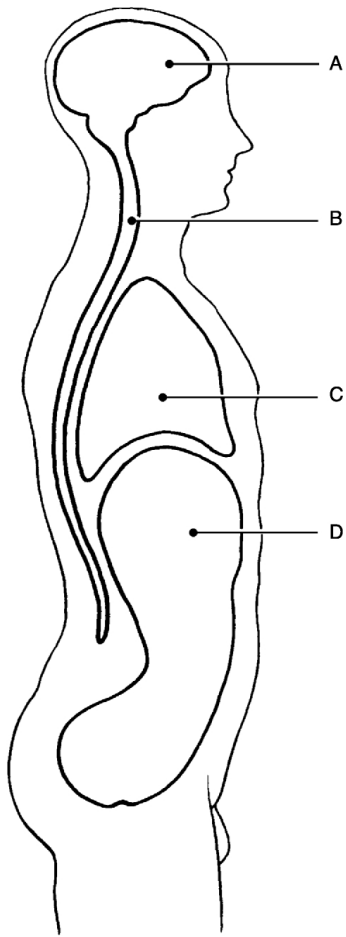


Figure 1.1

Using Figure 1.1, match the following cavities:

55) Thoracic cavity.

55) \_\_\_\_\_

Answer: C

Explanation:

56) \_\_\_\_\_ is explained by chemical and physical principles and is concerned with the function of specific organs or organic systems.

56) \_\_\_\_\_

Answer: Physiology

Explanation:

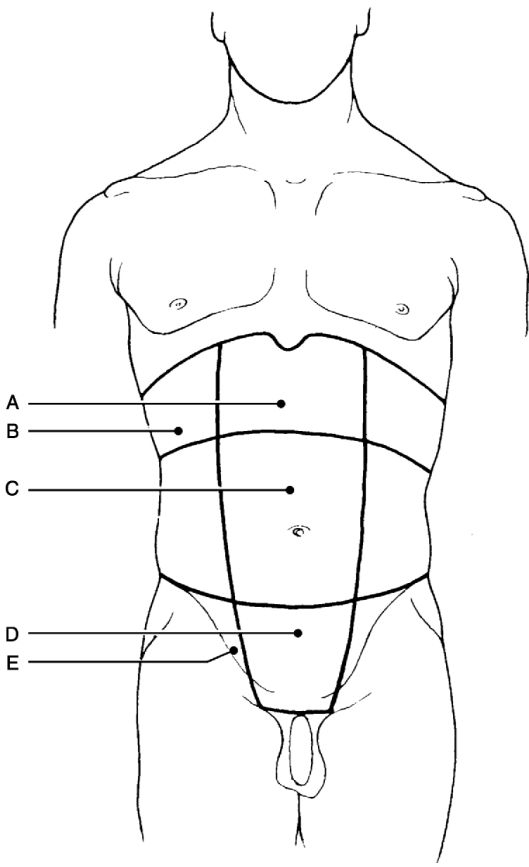


Figure 1.2

Using Figure 1.2, match the following regions:

57) Right hypochondriac.

57) \_\_\_\_\_

Answer: B

Explanation:

58) What is the pathway between the receptor and the control center in the reflex pathway called?

58) \_\_\_\_\_

Answer: afferent pathway

Explanation:

59) Similar cells that have a common function are called \_\_\_\_\_.

59) \_\_\_\_\_

Answer: tissues

Explanation:

60) What broad term covers all chemical reactions that occur within the body cells?

60) \_\_\_\_\_

Answer: metabolism

Explanation:

61) Fully describe the anatomical position for the human body.

61) \_\_\_\_\_

Answer: The body is erect, arms hanging at the sides, palms forward, and thumbs pointed away from the midline.

Explanation:

- 62) What is a dynamic equilibrium of your internal environment termed? 62) \_\_\_\_\_  
Answer: homeostasis  
Explanation:
- 63) What is the serous membrane that covers the intestines called? 63) \_\_\_\_\_  
Answer: visceral  
Explanation:
- 64) \_\_\_\_\_ physiology concerns urine production and kidney function. 64) \_\_\_\_\_  
Answer: Renal  
Explanation:
- 65) The ability to sense changes in the environment and respond to them is called \_\_\_\_\_. 65) \_\_\_\_\_  
Answer: responsiveness or irritability  
Explanation:
- 66) What does the "principle of complementarity of structures and function" mean? 66) \_\_\_\_\_  
Answer: What a structure can do depends on its specific form, or "structure determines function."  
Explanation:
- 67) Can lungs carry out excretory functions? Explain your answer. 67) \_\_\_\_\_  
Answer: Yes, carbon dioxide is a metabolic waste the lungs excrete.  
Explanation:
- 68) What is the goal of all of the negative feedback mechanisms of the body? 68) \_\_\_\_\_  
Answer: The goal is to prevent sudden severe changes within the body.  
Explanation:
- 69) What is the single most abundant chemical substance in the body? 69) \_\_\_\_\_  
Answer: water  
Explanation:

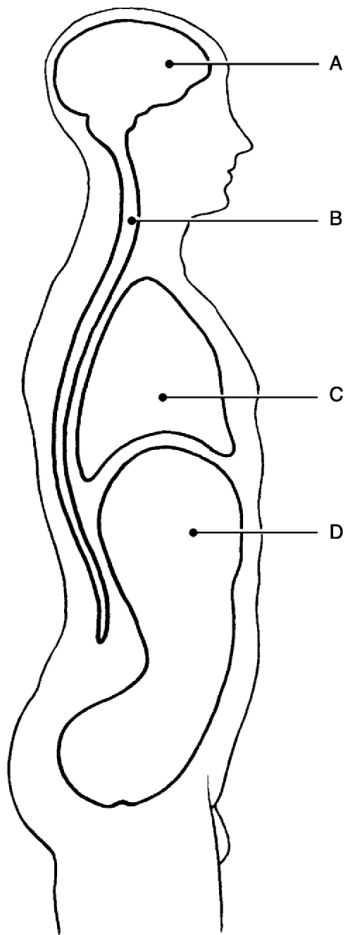


Figure 1.1

Using Figure 1.1, match the following cavities:

70) Cranial cavity.

70) \_\_\_\_\_

Answer: A

Explanation:

71) What can happen when the usual negative feedback mechanisms are overwhelmed and destructive positive feedback mechanisms take over?

71) \_\_\_\_\_

Answer: Homeostatic imbalances increase our risk for illness and produce the changes we associate with aging.

Explanation:

72) The higher we go in the mountains, the greater the atmospheric pressure, which causes a loss of oxygen. Comment on this statement.

72) \_\_\_\_\_

Answer: The statement is backwards—the higher we go, the less atmospheric pressure, therefore less oxygen.

Explanation:

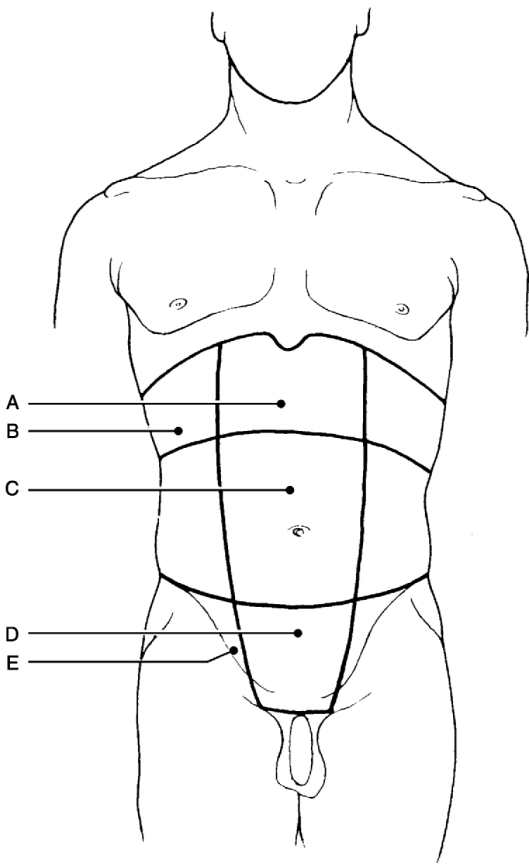


Figure 1.2

Using Figure 1.2, match the following regions:

73) Hypogastric (pubic) region.

73) \_\_\_\_\_

Answer: D

Explanation:

74) Why must a normal body temperature be maintained in order for chemical reactions to be continued at life-sustaining rates?

74) \_\_\_\_\_

Answer: If body temperature is too low, chemical reactions slow and eventually stop. If body temperature is too high, chemical reactions speed up and body proteins lose their normal shape, resulting in loss of function.

Explanation:

75) What does gross anatomy study?

75) \_\_\_\_\_

Answer: Larger structures of the body that can be seen with the naked eye.

Explanation:

76) The term that describes the back of the elbow is \_\_\_\_\_.

76) \_\_\_\_\_

Answer: olecranal

Explanation:

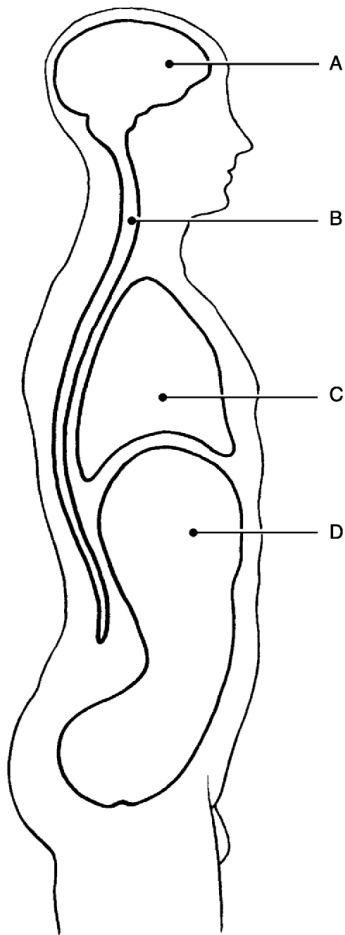


Figure 1.1

Using Figure 1.1, match the following cavities:

77) Abdominal cavity.

77) \_\_\_\_\_

Answer: D

Explanation:

78) Which body system would be most affected by a lower than normal atmospheric pressure?

78) \_\_\_\_\_

Answer: respiratory system

Explanation:

79) Which cavity contains the bladder, some reproductive organs, and the rectum?

79) \_\_\_\_\_

Answer: pelvic

Explanation:

80) Which feedback mechanism causes the variable to deviate further and further from its original value or range?

80) \_\_\_\_\_

Answer: positive feedback

Explanation:

81) The five cavities of the head are cranial, oral, nasal, middle ear, and \_\_\_\_\_.

81) \_\_\_\_\_

Answer: orbital

Explanation:

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

82) It is important for any organism to maintain its boundaries, so that its internal environment remains distinct from the external environment surrounding it.

82) \_\_\_\_\_

Answer:  True  False

Explanation:

83) Lungs carry out an excretory function.

83) \_\_\_\_\_

Answer:  True  False

Explanation:

84) The right hypochondriac region contains the majority of the stomach.

84) \_\_\_\_\_

Answer:  True  False

Explanation:

85) The anatomical position means the body is standing at attention with the palms facing forward and the thumbs pointing away from the body.

85) \_\_\_\_\_

Answer:  True  False

Explanation:

86) The serous membrane that lines the peritoneal cavity wall is called visceral peritoneum.

86) \_\_\_\_\_

Answer:  True  False

Explanation:

87) The epigastric region is located superior to the umbilical region.

87) \_\_\_\_\_

Answer:  True  False

Explanation:

88) Without some sort of negative feedback mechanism, it would be impossible to keep our body chemistry in balance.

88) \_\_\_\_\_

Answer:  True  False

Explanation:

89) A major function of serous membranes is to decrease friction.

89) \_\_\_\_\_

Answer:  True  False

Explanation:

90) Regardless of the variable being regulated, all homeostatic control mechanisms have at least three interdependent components.

90) \_\_\_\_\_

Answer:  True  False

Explanation:

91) A tissue consists of groups of similar cells that have a common function.

91) \_\_\_\_\_

Answer:  True  False

Explanation:

- 92) Positive feedback mechanisms tend to increase the original stimulus. 92) \_\_\_\_\_  
 Answer:  True  False  
 Explanation:
- 93) Embryology concerns the structural changes that occur in an individual from conception through old age. 93) \_\_\_\_\_  
 Answer:  True  False  
 Explanation:
- 94) Imaging is useful in discovering obstructed blood supplies in organs and tissues. 94) \_\_\_\_\_  
 Answer:  True  False  
 Explanation:
- 95) The elbow is proximal to the shoulder. 95) \_\_\_\_\_  
 Answer:  True  False  
 Explanation:

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

*Match the following systems to their functions:*

- 96) Removes and filters excess fluid from tissues. A) Lymphatic 96) \_\_\_\_\_  
 Answer: A

*Match the following examples of feedback mechanisms:*

- 97) Blood pressure A) Negative feedback 97) \_\_\_\_\_  
 Answer: A
- 98) Blood glucose levels 98) \_\_\_\_\_  
 Answer: A

*Match the following cavities and organs:*

- 99) Heart. A) Thoracic 99) \_\_\_\_\_  
 Answer: A

*Match the following regional terms and common terms:*

- 100) Arm. A) Brachial 100) \_\_\_\_\_  
 Answer: A

*Match the following cavities and organs:*

- 101) Stomach. A) Abdominopelvic 101) \_\_\_\_\_  
 Answer: A

*Match the following systems to their functions:*

- 102) Responds to environmental changes by transmitting electrical impulses. A) Nervous 102) \_\_\_\_\_  
 Answer: A

Match the regional/directional terms and examples:

103) The bridge of the nose is \_\_\_\_\_ to the left eye.

Answer: A

A) Medial

103) \_\_\_\_\_

Match the following cavities and organs:

104) Uterus.

Answer: A

A) Abdominopelvic

104) \_\_\_\_\_

Match the regional/directional terms and examples:

105) The upper arm is \_\_\_\_\_ to the forearm.

Answer: A

A) Proximal

105) \_\_\_\_\_

Match the following cavities and organs:

106) Brain.

Answer: A

A) Cranial

106) \_\_\_\_\_

Match the following regional terms and common terms:

107) Head.

Answer: A

A) Cephalic

107) \_\_\_\_\_

Match the following systems and organs:

108) Kidneys, bladder, ureters.

Answer: B

A) Respiratory

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

B) Urinary

109) Trachea, bronchi, alveoli.

Answer: A

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

Match the regional/directional terms and examples:

110) The heart is \_\_\_\_\_ to the stomach.

Answer: A

A) Superior

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

Match the following regional terms and common terms:

111) Knee (anterior aspect).

Answer: A

A) Patellar

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

Match the following systems to their functions:

112) Controls the body with chemical molecules called hormones.

Answer: A

A) Endocrine

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

Match the following regional terms and common terms:

113) Buttock.

Answer: A

A) Gluteal

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

Match the following systems to their functions:

114) Provides support and levers for muscles to work on.

Answer: A

A) Skeletal

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

*Match the following examples of feedback mechanisms:*

115) Blood clotting

Answer: A

A) Positive feedback

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

*Match the regional/directional terms and examples:*

116) The stomach is \_\_\_\_\_ to the spine.

Answer: A

A) Anterior

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

*Match the following systems to their functions:*

117) Directly causes mechanical motion.

Answer: A

A) Muscular

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

*Match the regional/directional terms and examples:*

118) The fingers are \_\_\_\_\_ to the wrist.

Answer: A

A) Distal

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

*Match the following systems and organs:*

119) Esophagus, large intestine, rectum.

Answer: A

A) Digestive

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

*Match the following cavities and organs:*

120) Lungs.

Answer: A

A) Thoracic

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

*Match the following systems to their functions:*

121) Produces antibodies that neutralize foreign substances.

Answer: A

A) Immune

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

*Match the following regional terms and common terms:*

122) Chest.

Answer: A

A) Thoracic

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

*Match the following systems and organs:*

123) Adrenal glands, pancreas, pituitary.

Answer: A

A) Endocrine

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

*Match the following systems to their functions:*

124) Protects underlying organs from mechanical damage and synthesizes vitamin D.

Answer: A

A) Integumentary

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

*Match the following systems to their functions:*

125) Delivers oxygen and nutrients to the tissues.

Answer: A

A) Cardiovascular

125) \_\_\_\_\_

Match the following examples of feedback mechanisms:

126) Delivering a baby

A) Positive feedback

126) \_\_\_\_\_

Answer: A

Match the following systems and organs:

127) Arteries, veins, heart.

A) Cardiovascular

127) \_\_\_\_\_

Answer: A

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

128) Explain why an 80-year-old woman requires a much longer time to recover from the flu than does a woman who is age 30.

Answer: As we age, our body's control systems become less efficient. As a result, our internal environment becomes less and less stable.

129) A surgeon removed a section of tissue along a transverse plane for microscopic examination. What two names would the section be called?

Answer: A cross section or a transverse section.

130) A small family was traveling in its van and had a minor accident. The children in the back seats were wearing lap belts, but still sustained numerous bruises about the abdomen, and had some internal organ injuries. Why is this area more vulnerable to damage than others?

Answer: The abdominal organs are the least protected in the body because they are not surrounded by a bony covering such as the ribs, pelvis, or cranium.

131) Judy is 16 years old and collapses on the gym floor with severe pain in her chest wall. She is rushed by ambulance to the emergency room. Judy is diagnosed with pleurisy and is given an anti-inflammatory through the intravenous route. Explain why an anti-inflammatory would be prescribed for someone with pleurisy.

Answer: The pleural space contains a small amount of fluid that acts as a lubricant, allowing the pleurae to slide smoothly over each other as the lungs expand and contract. Pleurisy is an inflammation of the parietal pleura of the lungs. When inflammation occurs in the pleural space, the pleurae do not slide smoothly and this causes severe pain.

132) The nurse charted: "Patient has an open wound located on lateral aspect of leg." Describe where the wound is located.

Answer: The wound is located on the outer side of the leg.

133) The patient was admitted to the hospital with hypertension. The development of arteriosclerosis has increased peripheral resistance to blood flow, worsening his hypertension. This is an example of what type of feedback loop and why?

Answer: Positive feedback loops are common in pathophysiological perpetuation of disease. For example, arteriosclerotic hypertension results in positive feedback mechanisms that enhance and propagate the initial step in the chain of events, which is hypertension.

Answer Key  
Testname: C1

- 1) D
- 2) B
- 3) C
- 4) A
- 5) C
- 6) A
- 7) D
- 8) A
- 9) B
- 10) D
- 11) A
- 12) C
- 13) D
- 14) C
- 15) D
- 16) D
- 17) A
- 18) D
- 19) B
- 20) C
- 21) B
- 22) A
- 23) A
- 24) C
- 25) B
- 26) C
- 27) C
- 28) C
- 29) B
- 30) C
- 31) C
- 32) C
- 33) C
- 34) A
- 35) C
- 36) D
- 37) B
- 38) A
- 39) A
- 40) B
- 41) D
- 42) B
- 43) C
- 44) B
- 45) negative
- 46) Anatomical terms are precise words that have limited usage, which prevents confusion when describing the location of body parts.
- 47) calcaneal
- 48) The walls of the abdominal cavity are formed only by trunk muscles and are not reinforced by bone. The pelvic organs receive a somewhat greater degree of protection from the bony pelvis.

Answer Key  
Testname: C1

- 49) They act to reduce friction and allow the organs to slide across cavity walls.
- 50) proximal
- 51) A
- 52) middle ear
- 53) E
- 54) C
- 55) C
- 56) Physiology
- 57) B
- 58) afferent pathway
- 59) tissues
- 60) metabolism
- 61) The body is erect, arms hanging at the sides, palms forward, and thumbs pointed away from the midline.
- 62) homeostasis
- 63) visceral
- 64) Renal
- 65) responsiveness or irritability
- 66) What a structure can do depends on its specific form, or "structure determines function."
- 67) Yes, carbon dioxide is a metabolic waste the lungs excrete.
- 68) The goal is to prevent sudden severe changes within the body.
- 69) water
- 70) A
- 71) Homeostatic imbalances increase our risk for illness and produce the changes we associate with aging.
- 72) The statement is backwards—the higher we go, the less atmospheric pressure, therefore less oxygen.
- 73) D
- 74) If body temperature is too low, chemical reactions slow and eventually stop. If body temperature is too high, chemical reactions speed up and body proteins lose their normal shape, resulting in loss of function.
- 75) Larger structures of the body that can be seen with the naked eye.
- 76) olecranal
- 77) D
- 78) respiratory system
- 79) pelvic
- 80) positive feedback
- 81) orbital
- 82) TRUE
- 83) TRUE
- 84) FALSE
- 85) TRUE
- 86) FALSE
- 87) TRUE
- 88) TRUE
- 89) TRUE
- 90) TRUE
- 91) TRUE
- 92) TRUE
- 93) FALSE
- 94) TRUE
- 95) FALSE
- 96) A
- 97) A

Answer Key  
Testname: C1

- 98) A
- 99) A
- 100) A
- 101) A
- 102) A
- 103) A
- 104) A
- 105) A
- 106) A
- 107) A
- 108) B
- 109) A
- 110) A
- 111) A
- 112) A
- 113) A
- 114) A
- 115) A
- 116) A
- 117) A
- 118) A
- 119) A
- 120) A
- 121) A
- 122) A
- 123) A
- 124) A
- 125) A
- 126) A
- 127) A
- 128) As we age, our body's control systems become less efficient. As a result, our internal environment becomes less and less stable.
- 129) A cross section or a transverse section.
- 130) The abdominal organs are the least protected in the body because they are not surrounded by a bony covering such as the ribs, pelvis, or cranium.
- 131) The pleural space contains a small amount of fluid that acts as a lubricant, allowing the pleurae to slide smoothly over each other as the lungs expand and contract. Pleurisy is an inflammation of the parietal pleura of the lungs. When inflammation occurs in the pleural space, the pleurae do not slide smoothly and this causes severe pain.
- 132) The wound is located on the outer side of the leg.
- 133) Positive feedback loops are common in pathophysiological perpetuation of disease. For example, arteriosclerotic hypertension results in positive feedback mechanisms that enhance and propagate the initial step in the chain of events, which is hypertension.