

Matching Questions

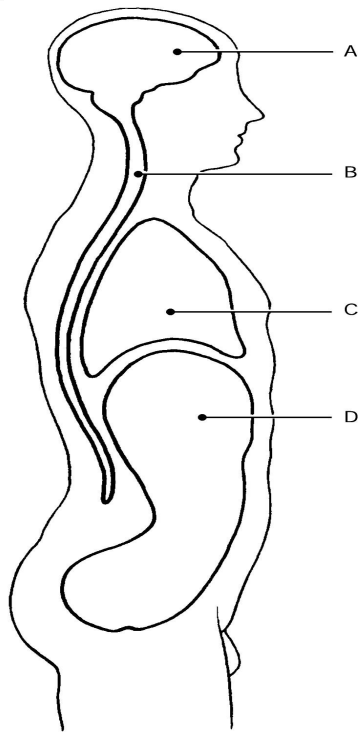


Figure 1.1

Using Figure 1.1, match the following cavities:

- 1) Thoracic cavity.

Answer: C

Diff: 1 Page Ref: 15-17; Fig. 1.9

- 2) Cranial cavity.

Answer: A

Diff: 1 Page Ref: 15-17; Fig. 1.9

- 3) Abdominal cavity.

Answer: D

Diff: 1 Page Ref: 15-17; Fig. 1.9

- 4) Vertebral cavity.

Answer: B

Diff: 1 Page Ref: 15-17; Fig. 1.9

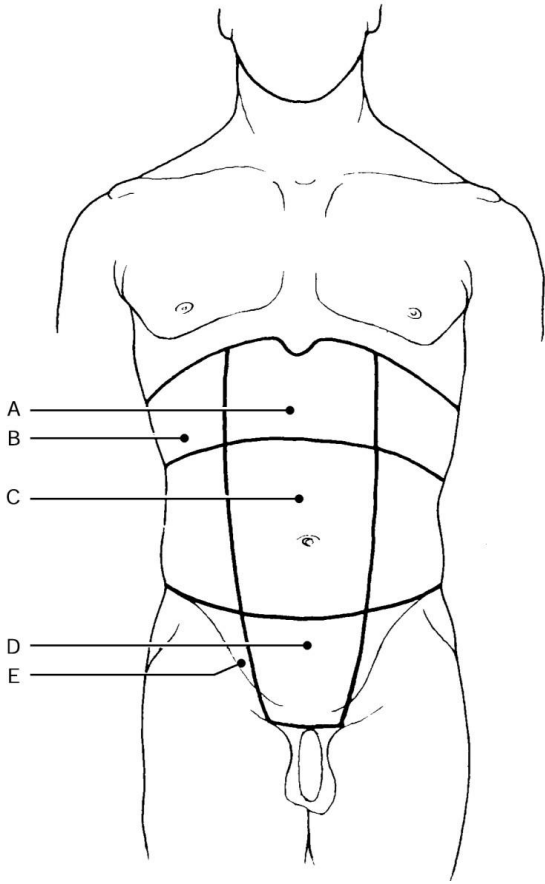


Figure 1.2

Using Figure 1.2, match the following regions:

5) Umbilical region.

Answer: C

Diff: 1 Page Ref: 18; Fig. 1.11

6) Right hypochondriac.

Answer: B

Diff: 1 Page Ref: 18; Fig. 1.11

7) Hypogastric (pubic) region.

Answer: D

Diff: 1 Page Ref: 18; Fig. 1.11

8) Epigastric region.

Answer: A

Diff: 1 Page Ref: 18; Fig. 1.11

9) Right iliac (inguinal) region.

Answer: E

Diff: 1 Page Ref: 18; Fig. 1.11

Match the following systems:

10) Directly causes mechanical motion.

Answer: D

Diff: 1 Page Ref: 5; Fig. 1.13

A) Skeletal

B) Nervous

11) Responds to environmental changes by transmitting electrical impulses.

Answer: B

Diff: 1 Page Ref: 5; Fig. 1.13

C) Integumentary

D) Muscular

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

Answer: A

Diff: 1 Page Ref: 5; Fig. 1.13

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

Answer: C

Diff: 2 Page Ref: 5; Fig. 1.13

Match the following systems:

14) Controls the body with chemical molecules called hormones.

Answer: A

Diff: 2 Page Ref: 8; Fig. 1.3

A) Endocrine

B) Immune

C) Cardiovascular

15) Delivers oxygen and nutrients to the tissues.

Answer: B

Diff: 1 Page Ref: 8; Fig. 1.3

D) Lymphatic

16) Produces antibodies that neutralize foreign substances.

Answer: A

Diff: 1 Page Ref: 7; Fig. 1.3

17) Removes and filters excess fluid from tissues.

Answer: C

Diff: 1 Page Ref: 7; Fig. 1.3

Match the following cavities:

27) Stomach.

Answer: A

Diff: 1 Page Ref: 15; Fig. 1.9

A) Abdominopelvic

B) Thoracic

28) Heart.

Answer: B

Diff: 1: Page Ref: 15; Fig. 1.9

C) Cranial

29) Uterus

Answer: A

Diff: 1 Page Ref: 15; Fig. 1.9

30) Brain.

Answer: C

Diff: 1 Page Ref: 15; Fig. 1.9

31) Lungs.

Answer: B

Diff: 1 Page Ref: 15; Fig. 1.9

Match the following technical terms:

32) Arm.

Answer: A

Diff: 1 Page Ref: 14; Fig. 1.7

A) Brachial

B) Thoracic

33) Buttock.

Answer: D

Diff: 1 Page Ref: 14; Fig. 1.7

C) Cephalic

D) Gluteal

34) Head.

Answer: C

Diff: 1 Page Ref: 14; Fig. 1.7

E) Patellar

35) Knee (anterior aspect).

Answer: E

Diff: 1 Page Ref: 14; Fig. 1.7

36) Chest.

Answer: B

Diff: 1 Page Ref: 14; Fig. 1.7

Match the following terms:

37) The bridge of the nose is _____ to the left eye.

Answer: A

Diff: 2 Page Ref: 13; Tbl. 1.1

A) Medial

B) Anterior

C) Proximal

38) The upper arm is _____ to the forearm.

Answer: C

Diff: 2 Page Ref: 13; Tbl. 1.1

D) Distal

E) Superior

39) The heart is _____ to the stomach.

Answer: E

Diff: 2 Page Ref: 13; Tbl. 1.1

40) The fingers are _____ to the wrist.

Answer: D

Diff: 2 Page Ref: 13; Tbl. 1.1

41) The stomach is _____ to the spine.

Answer: B

Diff: 2 Page Ref: 13; Tbl. 1.1

True/False Questions

- 1) Positive feedback mechanisms tend to increase the original stimulus.
Answer: TRUE
Diff: 1 Page Ref: 10
- 2) Imaging is useful in discovering obstructed blood supplies in organs and tissues.
Answer: TRUE
Diff: 1 Page Ref: 20
- 3) The anatomical position means the body is standing at attention with the palms facing forward and the thumbs pointing away from the body.
Answer: TRUE
Diff: 1 Page Ref: 12; Fig. 1.5
- 4) The elbow is proximal to the shoulder.
Answer: FALSE
Diff: 1 Page Ref: 13
- 5) The serous membrane that lines the peritoneal cavity is called visceral peritoneum.
Answer: FALSE
Diff: 2 Page Ref: 17
- 6) A major function of serous membranes is to increase friction.
Answer: FALSE
Diff: 1 Page Ref: 17
- 7) The right hypochondriac region contains the majority of the stomach.
Answer: FALSE
Diff: 1 Page Ref: 18; Fig. 1.11
- 8) Lungs carry out an excretory function.
Answer: TRUE
Diff: 2 Page Ref: 8
- 9) Embryology concerns the structural changes that occur in an individual from conception through old age.
Answer: FALSE
Diff: 1 Page Ref: 2
- 10) A tissue consists of groups of similar cells that have a common function.
Answer: TRUE
Diff: 1 Page Ref: 3
- 11) It is important for any organism to maintain its boundaries, so that its internal environment remains distinct from the external environment surrounding it.
Answer: TRUE
Diff: 1 Page Ref: 5
- 12) Without some sort of positive or negative feedback mechanism, it would be impossible to keep our body chemistry in balance.
Answer: TRUE
Diff: 1 Page Ref: 10

- 13) Regardless of the variable being regulated, all homeostatic control mechanisms have at least three interdependent components.
Answer: TRUE
Diff: 2 Page Ref: 9
- 14) In a negative feedback mechanism, ADH is the equivalent to the "thermostat" in your home heating system.
Answer: FALSE
Diff: 2 Page Ref: 10-11; Fig. 1.1
- 15) The epigastric region is located superior to the umbilical region.
Answer: TRUE
Diff: 1 Page Ref: 18; Fig. 1.11

Multiple-Choice Questions

- 1) Histology could be defined as a study of _____.
A) cells
B) tissues
C) cell chemistry
D) the gross structures of the body
Answer: B
Diff: 1 Page Ref: 2
- 2) The study of the heart may incorporate many aspects of anatomy but as a whole you would say it is _____ anatomy.
A) microscopic
B) gross
C) developmental
D) systemic
Answer: B
Diff: 1 Page Ref: 2
- 3) An increased rate of breathing as a result of an increased buildup of carbon dioxide in the bloodstream would be an example of _____.
A) maintaining boundaries
B) excretion of metabolic waste
C) responsiveness
D) metabolism
Answer: D
Diff: 2 Page Ref: 8
- 4) Normal body temperature is _____ degrees centigrade.
A) 98
B) 68
C) 47
D) 37
Answer: D
Diff: 1 Page Ref: 8

5) If you consider your home air conditioner in terms of homeostasis then the wall thermostat would be the _____.

- A) control center
- B) receptor
- C) effector
- D) variable

Answer: A

Diff: 2 Page Ref: 9; Fig. 1.5

6) The purpose of negative feedback is _____.

- A) to control all levels of the body's systems
- B) to prevent sudden and severe changes within the body
- C) to keep the body's sugar "normal"
- D) to regulate

Answer: B

Diff: 2 Page Ref: 10

7) _____ is the specific name for the hip.

- A) Manus
- B) Inguinal
- C) Pedal
- D) Coxal

Answer: D

Diff: 1 Page Ref: 14; Fig. 1.7

8) An oblique cut is one that _____.

- A) is cut horizontal right and left
- B) is cut between the vertical and horizontal
- C) is cut vertical right and left
- D) is cut perpendicular to vertical and horizontal

Answer: B

Diff: 2 Page Ref: 15

9) The heart lies in the _____ cavity.

- A) dorsal mediastium
- B) ventral pleural
- C) dorsal pericardial
- D) ventral pericardial

Answer: D

Diff: 1 Page Ref: 15; Fig. 1.9

10) _____ cavities are spaces between bones.

- A) Nasal
- B) Synovial
- C) Orbital
- D) Oral

Answer: B

Diff: 2 Page Ref: 19

11) A structure that is composed of two or more tissues would be _____.

- A) a complex tissue
- B) an organ system
- C) an organ
- D) a complex cell

Answer: C

Diff: 1 Page Ref: 3

12) The cavities between bones are called _____ cavities.

- A) parietal
- B) pericardial
- C) vertebral
- D) synovial

Answer: D

Diff: 1 Page Ref: 19

13) Which of the following would *not* be functional characteristics of life?

- A) movement
- B) responsiveness to external stimuli
- C) maintenance of boundaries
- D) decay

Answer: D

Diff: 2 Page Ref: 5-8

14) _____ means toward or at the back of the body, behind.

- A) Anterior
- B) Lateral
- C) Distal
- D) Dorsal

Answer: D

Diff: 1 Page Ref: 13

15) The single most abundant chemical substance of the body, accounting for 60 to 80% of body weight, is _____.

- A) oxygen
- B) protein
- C) water
- D) hydrogen

Answer: C

Diff: 1 Page Ref: 8

16) The posterior side of the patella would be called _____.

- A) sural
- B) crural
- C) antecubital
- D) popliteal

Answer: D

Diff: 2 Page Ref: 14; Fig. 1.7

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

Answer: C

Diff: 2 Page Ref: 10

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

Answer: C

Diff: 1 Page Ref: 12

- 19) A good example of a positive feedback mechanism would be _____.
- A) body temperature regulation
 - B) regulating glucose levels in the blood
 - C) enhancement of labor contractions by oxytocin
 - D) blood calcium level regulation

Answer: C

Diff: 1 Page Ref: 10-11

- 20) A parasagittal plane is _____.
- A) a transverse cut just above the knees
 - B) two cuts dividing the body into left and right halves
 - C) any sagittal plane except the median
 - D) any cut dividing the body into anterior and posterior

Answer: C

Diff: 2 Page Ref: 15

- 21) Which of the following organs or structures would be found in the left iliac region?
- A) appendix
 - B) stomach
 - C) liver
 - D) intestines

Answer: D

Diff: 2 Page Ref: 18; Fig. 1.11

- 22) The parietal pleural would represent a serous membrane _____.
- A) covering individual lungs
 - B) lining the thoracic cavity
 - C) covering the heart
 - D) lining the abdominal cavity

Answer: B

Diff: 2 Page Ref: 17

23) Which one of the following is considered a functional system rather than an organ system?

- A) endocrine
- B) lymphatic
- C) immune
- D) nervous

Answer: C

Diff: 2 Page Ref: 4, 6-7; Fig. 1.3

24) Choose the anatomical topic and definition that is *not* correctly matched.

- A) Gross anatomy: study of structures visible to the eye.
- B) Microscopic anatomy: study of structures too small to be seen by the naked eye.
- C) Developmental anatomy: study of the changes in an individual from birth through old age.
- D) Embryology: study of the changes in an individual from conception to birth.

Answer: C

Diff: 1 Page Ref: 2

25) Homeostasis is the condition in which the body maintains _____.

- A) the lowest possible energy usage
- B) a relatively stable internal environment, within limits
- C) a static state with no deviation from preset points
- D) a dynamic state within an unlimited range

Answer: B

Diff: 2 Page Ref: 9-10

26) The lungs are located in the following cavities _____.

- A) pleural, ventral, and thoracic
- B) mediastinum, thoracic, and ventral
- C) pleural, dorsal, and abdominal
- D) pericardial, ventral, and thoracic

Answer: A

Diff: 1 Page Ref: 15, 17; Fig. 1.9

27) Choose the following statement that is *not* completely correct regarding serous membranes.

- A) Serosa are very thin, double-layered structures.
- B) Serous membranes are divided into parietal and visceral membranes with a potential space between the two.
- C) Visceral pericardium covers the surface of the heart, and parietal pericardium lines the walls of the heart.
- D) Serous membranes secrete a watery lubricating fluid.

Answer: C

Diff: 2 Page Ref: 17-18

28) Place the following in correct sequence from simplest to most complex:

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

A) 1-2-3-4-5

B) 2-1-4-3-5

C) 2-1-3-4-5

D) 1-2-4-3-5

Answer: B

Diff: 2 Page Ref: 3-4

29) Which of the following imaging devices would best localize a tumor in a person's brain?

A) X ray

B) DSA

C) PET

D) MRI

Answer: D

Diff: 2 Page Ref: 20-21

30) Which of these is *not* part of the dorsal cavity?

A) cranial cavity

B) thoracic cavity

C) spinal cord

D) vertebral cavity

Answer: B

Diff: 1 Page Ref: 15

31) The spleen is located in which abdominopelvic quadrant?

A) right upper

B) right lower

C) left upper

D) left lower

Answer: C

Diff: 2 Page Ref: 19; Fig. 1.12

32) Which of the following statements is most correct of homeostatic imbalance?

A) It is considered the cause of most diseases.

B) The internal environment is becoming more stable.

C) Positive feedback mechanisms are overwhelmed.

D) Negative feedback mechanisms take over.

Answer: A

Diff: 3 Page Ref: 11

33) Subdivisions of anatomy include _____.

A) gross, macroscopic, visual, and microscopic

B) gross, regional, dissection, and surface

C) regional, surface, visual, and microscopic

D) gross, regional, systemic, and surface

Answer: D

Diff: 2 Page Ref: 2

34) The term *pollex* refers to the _____.

- A) great toe
- B) calf
- C) fingers
- D) thumb

Answer: D

Diff: 1 Page Ref: 14; Fig. 1.7

35) The dorsal body cavity is the site of which of the following?

- A) intestines
- B) brain
- C) lungs
- D) liver

Answer: B

Diff: 1 Page Ref: 15; Fig. 1.9

36) Select the statement that is most correct.

- A) The immune system is a functional system rather than a structural system.
- B) Organ systems operate independently to maintain life.
- C) The endocrine system is not a true structural organ system.
- D) Organ systems can be composed of cells or tissues, but not both.

Answer: A

Diff: 2 Page Ref: 7; Fig. 1.3

37) One of the functional characteristics of life is irritability. This refers to _____.

- A) indigestible food residues stimulating the excretory system
- B) sensing changes in the environment and then reacting or responding to them
- C) the nervous system causing all living things to sometimes experience anger
- D) the necessity for all organisms to reproduce

Answer: B

Diff: 3 Page Ref: 5

38) Survival needs of the body include _____.

- A) nutrients, water, movement, and reproduction
- B) nutrients, water, growth, and reproduction
- C) water, atmospheric pressure, growth, and movement
- D) nutrients, water, atmospheric pressure, and oxygen

Answer: D

Diff: 3 Page Ref: 8

39) The frontal plane is also called the _____ plane.

- A) vertical
- B) oblique
- C) coronal
- D) median

Answer: C

Diff: 1 Page Ref: 15

- 40) The anatomical position is used _____.
- A) rarely, because people don't usually assume this position
 - B) as a standard reference point for directional terms regardless of the actual position of the body
 - C) only when a body is lying down
 - D) as the most comfortable way to stand when dissecting a cadaver

Answer: B

Diff: 2 Page Ref: 12

- 41) A horizontal section through the body is called _____.
- A) frontal
 - B) regional
 - C) sagittal
 - D) transverse

Answer: D

Diff: 1 Page Ref: 15

- 42) A vertical section through the body, dividing it into left and right, is called _____.
- A) frontal
 - B) regional
 - C) sagittal
 - D) transverse

Answer: C

Diff: 1 Page Ref: 15

- 43) A vertical section through the body, dividing it into anterior and posterior, is called _____.
- A) frontal
 - B) median
 - C) sagittal
 - D) transverse

Answer: A

Diff: 1 Page Ref: 15

- 44) Which body cavity protects the nervous system?
- A) Cranial
 - B) Dorsal
 - C) Vertebral
 - D) Thoracic

Answer: B

Diff: 1 Page Ref: 15

Fill-in-the-Blank/Short Answer Questions

- 1) _____ consist of similar cells that have a common function.

Answer: Tissues

Diff: 1 Page Ref: 3

- 2) The _____ system secretes hormones that regulate growth processes and nutrient usage by body cells.

Answer: endocrine

Diff: 2 Page Ref: 6; Fig. 1.3

- 3) _____ is a term that describes the back of the elbow.

Answer: Olecranal

Diff: 2 Page Ref: 14; Fig. 1.7

- 4) _____ is a term that describes the heel region.
Answer: Calcaneal
Diff: 1 Page Ref: 14; Fig. 1.7
- 5) The elbow is _____ to the wrist.
Answer: proximal
Diff: 2 Page Ref: 13; Fig. 1.7
- 6) The _____ cavity contains tiny bones that transmit sound vibrations to the organ of hearing in the inner ear.
Answer: middle ear
Diff: 1 Page Ref: 19
- 7) _____ is explained by chemical and physical principles and is concerned with the function of specific organs or organic systems.
Answer: Physiology
Diff: 1 Page Ref: 3
- 8) _____ is a dynamic equilibrium of your internal environment.
Answer: Homeostasis
Diff: 2 Page Ref: 9
- 9) The _____ cavity contains the bladder, some reproductive organs, and the rectum.
Answer: pelvic
Diff: 1 Page Ref: 15; Fig. 1.9
- 10) _____ peritoneum is the serous membrane that covers the intestines.
Answer: Visceral
Diff: 1 Page Ref: 18
- 11) _____ physiology concerns urine production and kidney function.
Answer: Renal
Diff: 1 Page Ref: 3
- 12) _____ is a broad term that covers all chemical reactions that occur within the body cells.
Answer: Metabolism
Diff: 1 Page Ref: 6-7
- 13) What is the function of the serous membranes?
Answer: They act to reduce friction and allow the organs to slide across cavity walls.
Diff: 2 Page Ref: 17-18
- 14) Fully describe the anatomical position for the human body.
Answer: The body is erect, arms hanging at the sides, palms forward, and thumbs pointed away from the midline.
Diff: 2 Page Ref: 12
- 15) Gross anatomy refers to:

16) Can lungs carry out excretory functions? Explain.

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

18) Why is anatomical terminology necessary?

19) The lungs are _____ to the skin.

20) The five cavities of the head are cranial, oral, nasal, middle ear, and _____.

Clinical Questions

- 1) 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?

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

- 3) Judy is 16 years old and collapses on the gym floor in severe pain to 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.

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

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

- 6) The client 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?

