

1. Anatomy and Physiology

Write the terms that match the phrases in the spaces at the right.

- | | |
|--|-------------------|
| 1) The study of cells. | <u>Cytology</u> |
| 2) The study of body organization and structure. | <u>Anatomy</u> |
| 3) The study of body functions. | <u>Physiology</u> |

2. Levels of Organization

a. List the levels of organization from the most complex to the simplest.

- | | |
|------------------------|--------------------|
| 1) <u>Organismic</u> | 4) <u>Tissue</u> |
| 2) <u>Organ system</u> | 5) <u>Cellular</u> |
| 3) <u>Organ</u> | 6) <u>Chemical</u> |

b. Write the terms that match the phrases in the spaces at the right.

- | | |
|---|---------------------|
| 1) A coordinated group of organs. | <u>Organ system</u> |
| 2) Structural and functional units of the body. | <u>Cells</u> |
| 3) An aggregation of similar cells. | <u>Tissue</u> |

c. Match the names of the organ systems with the phrases.

Cardiovascular	Lymphatic	Reproductive, male
Digestive	Muscle	Respiratory
Endocrine	Nervous	Skeletal
Integumentary	Reproductive, female	Urinary

- | | |
|--|-----------------------------|
| 1) Stomach, liver, intestines. | <u>Digestive</u> |
| 2) Brain, spinal cord, nerves. | <u>Nervous</u> |
| 3) Provides chemical coordination. | <u>Endocrine</u> |
| 4) Skin, hair, nails. | <u>Integumentary</u> |
| 5) Returns lymph to blood; provides immunity. | <u>Lymphatic</u> |
| 6) Bones, ligaments, cartilages. | <u>Skeletal</u> |
| 7) Contraction enables movement. | <u>Muscle</u> |
| 8) Transports materials to and from cells. | <u>Cardiovascular</u> |
| 9) Kidneys, ureters, urinary bladder. | <u>Urinary</u> |
| 10) Testes, penis, prostate gland. | <u>Reproductive, male</u> |
| 11) Ovaries, oviducts, uterus, vagina. | <u>Reproductive, female</u> |
| 12) Blood, heart, arteries, veins. | <u>Cardiovascular</u> |
| 13) Supports the body. | <u>Skeletal</u> |
| 14) Secretes hormones that regulate functions. | <u>Endocrine</u> |
| 15) Regulates volume of body fluids. | <u>Urinary</u> |
| 16) Protects underlying tissues. | <u>Integumentary</u> |
| 17) Rapid coordination of body functions. | <u>Nervous</u> |
| 18) Digests food and absorbs nutrients. | <u>Digestive</u> |

19) Gas exchange between air and blood.

20) Larynx, trachea, bronchi, and lungs.

Respiratory

Respiratory

3. Directional Terms

Provide the term that correctly completes each statement.

- 1) The head is ____ to the neck.
- 2) The hand is ____ to the wrist.
- 3) The skin is ____ to the muscles.
- 4) The mouth is ____ to the nose.
- 5) The elbow is ____ to the wrist.
- 6) The ear is on the ____ surface of the head.
- 7) The umbilicus is on the ____ body surface.
- 8) The hip is on the ____ body surface.
- 9) The buttocks are on the ____ body surface.

Superior

Distal

Exterior (superficial)

Inferior

Proximal

Lateral

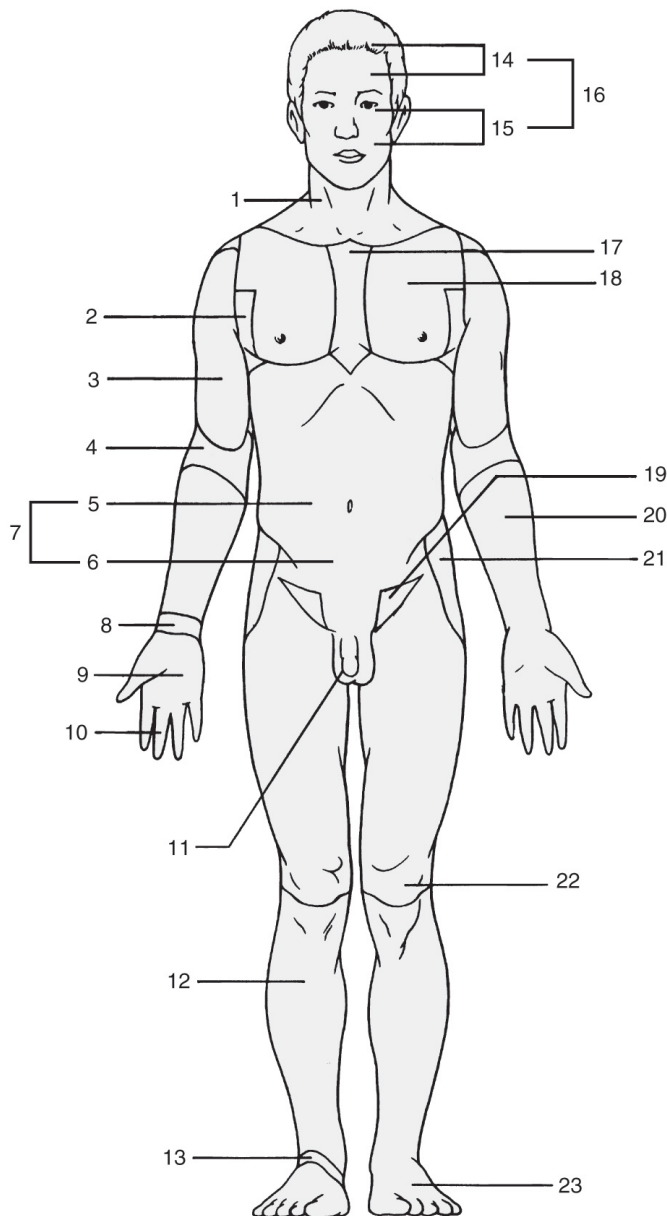
Anterior (ventral)

Lateral

Posterior (dorsal)

4. Body Regions

Label the body regions by placing the number of the label line in the space by the correct label.



5 Abdominal

7 Abdominopelvic

20 Antebrachial

4 Antecubital

2 Axillary

3 Brachial

8 Carpal

16 Cephalic

1 Cervical

21 Coxal

14 Cranial

12 Crural

10 Digital

15 Facial

11 Genital

19 Inguinal

9 Palmar

22 Patellar

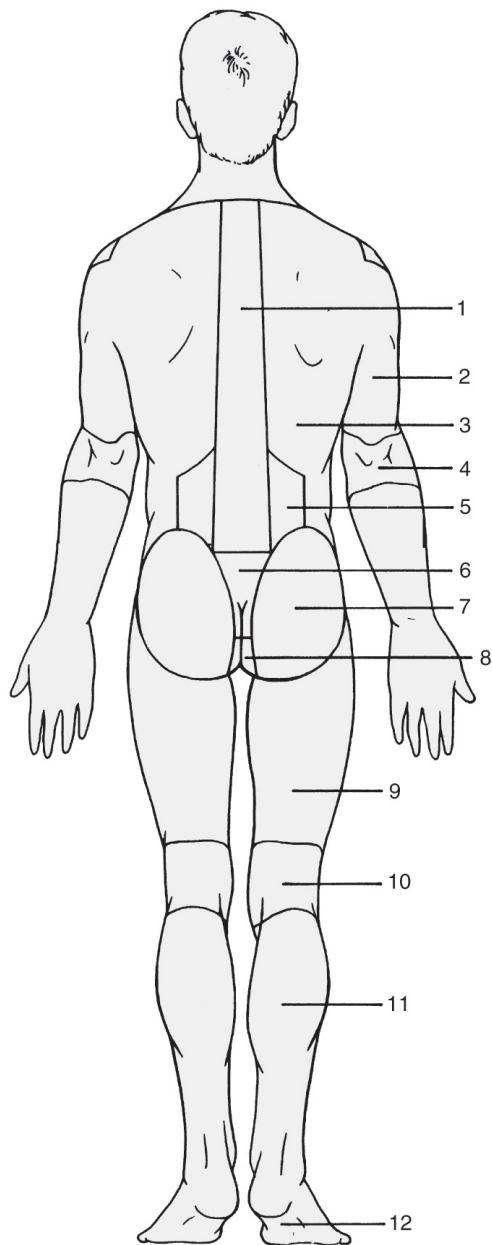
18 Pectoral

23 Pedal

6 Pelvic

17 Sternal

13 Tarsal



- 2 Brachial
- 4 Cubital
- 11 Crural
- 3 Dorsum
- 9 Femoral
- 7 Gluteal
- 5 Lumbar
- 12 Plantar
- 8 Perineal
- 10 Popliteal
- 6 Sacral
- 1 Vertebral

5. Body Planes and Sections

Name the planes that match the statements.

- 1) Divides the body into equal left and right halves.
- 2) Divides the body into superior and inferior portions.
- 3) Divides the body into left and right portions.
- 4) Divides the body into anterior and posterior portions.

Midsagittal

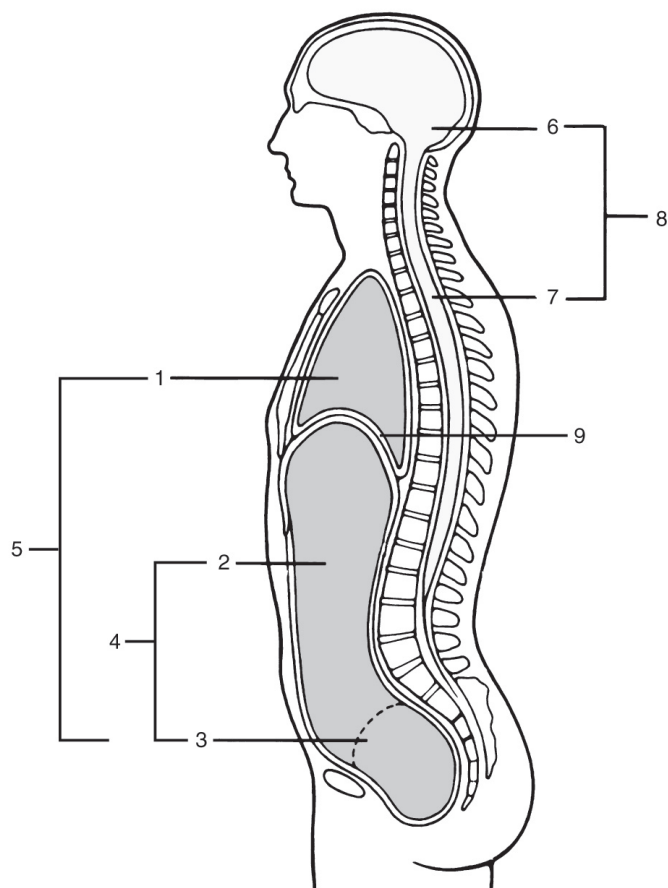
Transverse

Sagittal

Coronal (frontal)

6. Body Cavities

- a. Label the body cavities and related structures by placing the number of the label line in the space by the correct label.



Cavities

- 2 Abdominal
- 4 Abdominopelvic
- 6 Cranial
- 8 Dorsal
- 3 Pelvic
- 7 Vertebral canal
- 1 Thoracic
- 5 Ventral

Structure

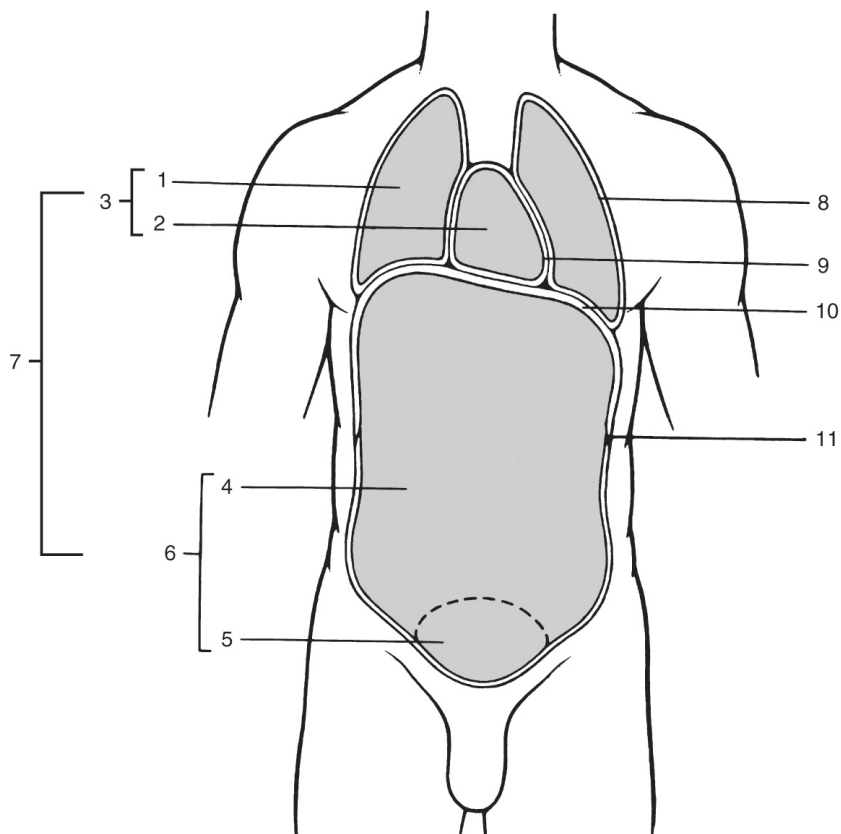
- 9 Diaphragm

Cavities

- 4 Abdominal
- 6 Abdominopelvic
- 5 Pelvic
- 2 Pericardial
- 1 Pleural
- 3 Thoracic
- 7 Ventral

Structures

- 10 Diaphragm
- 9 Parietal pericardium
- 11 Parietal peritoneum
- 8 Parietal pleura



- b. Place the number of the cavity in which the organ occurs in the space by the organ.
- | | | |
|---------------------------|--------------------|----------------------------|
| 1) Abdominal | 3) Pelvic | 5) Thoracic, lateral parts |
| 2) Cranial | 4) Vertebral canal | 6) Thoracic, mediastinum |
| <u>2</u> Brain | <u>1</u> Kidneys | <u>4</u> Spinal cord |
| <u>1</u> Gallbladder | <u>1</u> Liver | <u>6</u> Thymus |
| <u>6</u> Heart | <u>5</u> Lungs | <u>3</u> Urinary bladder |
| <u>1</u> Intestine, small | <u>1</u> Pancreas | <u>3</u> Rectum |
- c. Write the names of the membranes that match the statements in the spaces at the right.
- | | |
|--|-----------------------------|
| 1) Covers the heart. | <u>Visceral pericardium</u> |
| 2) Covers the stomach. | <u>Visceral peritoneum</u> |
| 3) Lines the abdominal cavity. | <u>Parietal peritoneum</u> |
| 4) Covers the brain. | <u>Meninges</u> |
| 5) Lines the thoracic cavity. | <u>Parietal pleurae</u> |
| 6) Lines the spinal cavity. | <u>Meninges</u> |
| 7) Cover the lungs. | <u>Visceral pleurae</u> |
| 8) Forms double-membrane sac around heart. | <u>Parietal pericardium</u> |
| 9) Double-layered membranes supporting abdominal organs. | <u>Mesenteries</u> |

7. Abdominopelvic Subdivisions

Select the abdominopelvic quadrant and abdominopelvic region in which the following structures are located.

Quadrants

1. Right upper
2. Left upper
3. Right lower
4. Left lower

1, 5 Gallbladder

2, 7 Spleen

3, 4, 6 Rectum

1, 5, 13 Right kidney

3, 6 Appendix

Regions

5. Epigastric
6. Hypogastric
7. Left hypochondriac
8. Left iliac
9. Left lumbar

1, 2, 5, 7 Stomach

1, 3, 10, 11, 12 Ascending colon

3, 4, 6 Urinary bladder

2, 5, 13 Left kidney

1, 2, 5, 13 Pancreas

10. Right hypochondriac

11. Right iliac

12. Right lumbar

13. Umbilical

8. Maintenance of Life

Write the terms that match the statements in the spaces at the right.

- 1) Maintenance of a dynamic balance of substances in body fluids.
- 2) The sum of all life processes.
- 3) Breakdown of complex substances.
- 4) Synthesis of complex substances.
- 5) Maintenance of a relatively stable internal environment.

Homeostasis

Metabolism

Catabolism

Anabolism

Homeostasis

- 6) Sum of the chemical reactions that occur in the body.
- 7) List the five basic needs essential for human life.

Metabolism

Food

Water

Oxygen

Body temperature

Atmospheric pressure

9. Clinical Applications



- a. A patient complains of pain in the epigastric region. What organs may be involved?

Gall bladder, liver, pancreas, or stomach

- b. A patient complains of pain in the right lower quadrant. What organs may be involved?

Appendix, cecum, ascending colon, or small intestine