Directional Terms, Planes, and Sections

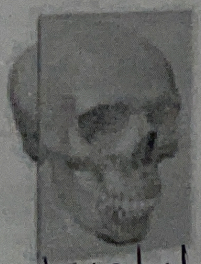
3. Define *plane*. A flat surface formed by making a cut through the (real or imaginary) body or part of it.

4. Several incomplete statements appear below. Correctly complete each statement by choosing the appropriate anatomical term from the choices. Use each term only once.

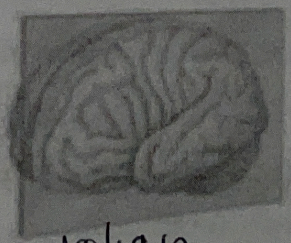
anterior	inferior	posterior	superior
distal	lateral	proximal	transverse
frontal	medial	sagittal	

1. The thoracic cavity is superior to the abdominopelvic cavity.
2. The trachea (windpipe) is anterior to the vertebral column.
3. The wrist is proximal to the hand.
4. If an incision cuts the heart into left and right parts, a sagittal plane of section was used.
5. The nose is medial to the cheekbones.
6. The thumb is lateral to the ring finger.
7. The vertebral cavity is posterior to the cranial cavity.
8. The knee is inferior to the thigh.
9. The plane that separates the head from the neck is the transverse plane.
10. The popliteal region is distal to the patellar region.
11. The plane that separates the anterior body surface from the posterior body surface is the frontal plane.

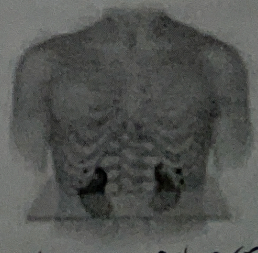
5. Correctly identify each of the body planes by writing the appropriate term on the answer line below the drawing.



(a) frontal (coronal plane)



(b) Median (Midsagittal plane)



(c) transverse plane

Body Cavities

6. Name the muscle that subdivides the ventral body cavity. Diaphragm
7. Which body cavity provides the least protection to its internal structures? Abdominal cavity
8. For the body cavities listed, name one organ located in each cavity.
   1. cranial cavity brain
   2. vertebral cavity spinal cord

3. thoracic cavity heart and lungs
4. abdominal cavity large and small intestine
5. pelvic cavity Vagina, urinary bladder
6. mediastinum heart, esophagus

9. Name the abdominopelvic region where each of the listed organs is located.
   1. spleen left hypochondriac region
   2. urinary bladder pubic (hypogastric) region
   3. stomach (largest portion) epigastric region
   4. cecum right inguinal (iliac) region

10. Explain how serous membranes protect organs from infection. The serosa lining the abdominal cavity and covering its organs is the peritoneum the serosa enclosing the lungs is the pleura and serosa around the heart is the pericardium

11. Which serous membrane(s) is/are found in the thoracic cavity? parietal pericardium, pericardial cavity with seraus fluid, visceral pericadium, heart

12. Which serous membrane(s) is/are found in the abdominopelvic cavity? parietal peritoneum, visceral peritoneum, liver, peritneal cavity, stomach, kidney

13. Using the key choices, identify the small body cavities described below.

Key: a. middle ear cavity b. nasal cavity c. oral cavity d. orbital cavity e. synovial cavity

D 1. holds the eyes in an anterior-facing position
A 2. houses three tiny bones involved in hearing
B 3. contained within the nose
C 4. contains the tongue
E 5. surrounds a joint

14. Name the body region that blood is usually drawn from. Antecubital region

15. A patient has been diagnosed with appendicitis. Use anatomical terminology to describe the location of the person's pain. Assume that the pain is referred to the surface of the body above the organ. Right inguinal region

16. Which body cavity would be opened to perform a hysterectomy? pelvic cavity

17. Which smaller body cavity would be opened to perform a total knee joint replacement? patellar cavity

18. An abdominal hernia results when weakened muscles allow the protrusion of abdominal structures. In the case of an umbilical hernia, parts of a serous membrane and the small intestine form the bulge. Which serous membrane is involved? Parietal peritaneum

3. Name the cells that are produced by the testes and ovaries. Reproductive cells

4. List the four primary tissue types. Epithelial, nervous, connective, muscular

5. Explain why an artery is an organ. An artery is made up of various types of tissues which is what classifies it as an organ. Arteries also carry out a function to carry oxygen, carbon dioxide, nutrients and more.

Instructors may assign a portion of the Review Sheet questions using Mastering A&P™

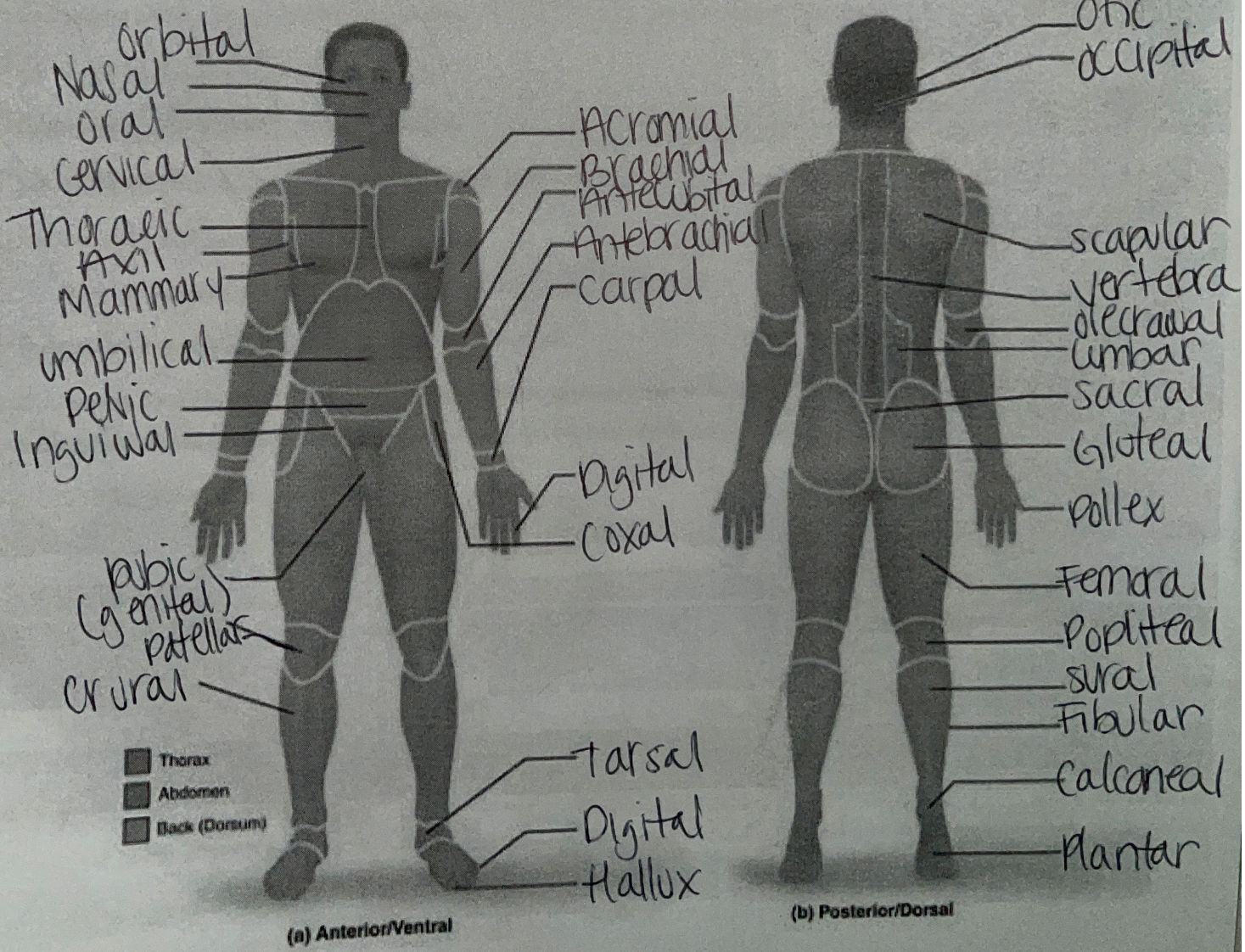
1 EXERCISE REVIEW SHEET
The Language of Anatomy

Name Ayanna Jack Lab Time/Date BIO2311 / 6:00-8:00p

Regional Terms

1. Describe completely the standard human anatomical position. The body standing upright and facing forward with the legs parallel to one another.

2. Use the regional terms to correctly label the body regions indicated on the figures below.



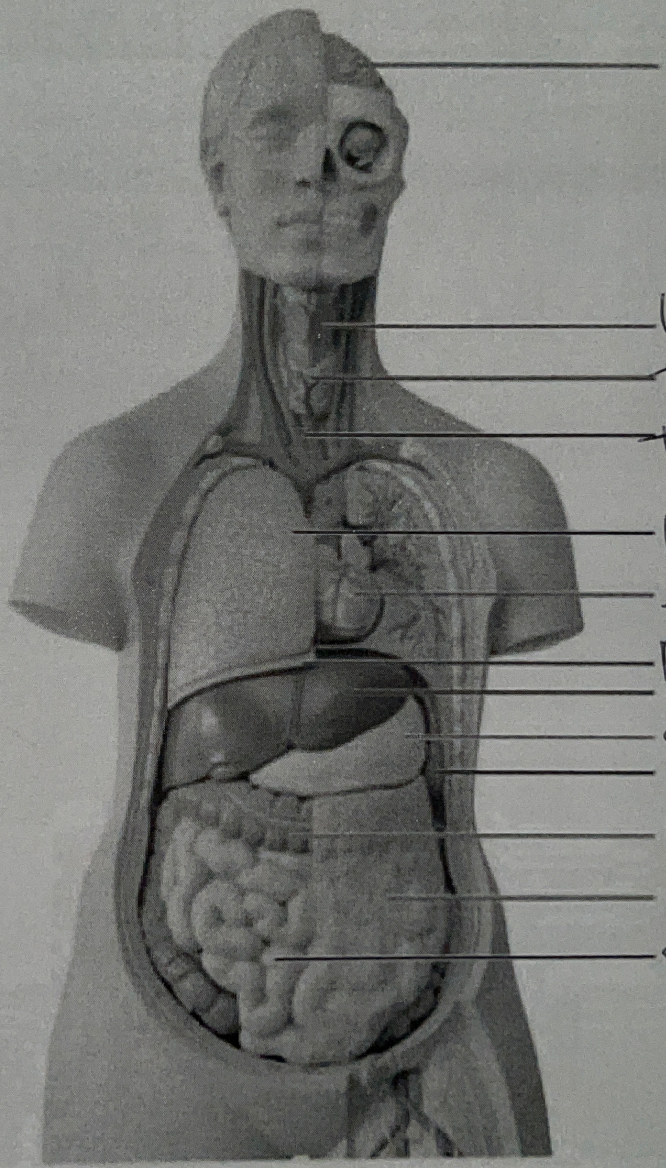
Instructors may assign a portion of the Review Sheet questions using Mastering A&P™

EXERCISE 2 REVIEW SHEET

Organ Systems Overview

Name Aryanna Jack Lab Time/Date B02311 6pm-8pm

1. Label each of the organs at the end of the supplied leader lines.



2. Name the *organ system* to which each of the following sets of organs or body structures belongs.

Lymphatic 1. thymus, spleen, lymphatic vessels

Skeletal 2. bones, cartilages, tendons

Endocrine 3. pancreas, pituitary gland

Respiratory 4. trachea, bronchi, lungs

Integumentary 5. epidermis, dermis, cutaneous sense organs

Reproductive 6. testis, prostate

Digestive 7. liver, large intestine, rectum

Urinary 8. kidneys, ureter, urethra