

EXERCISE

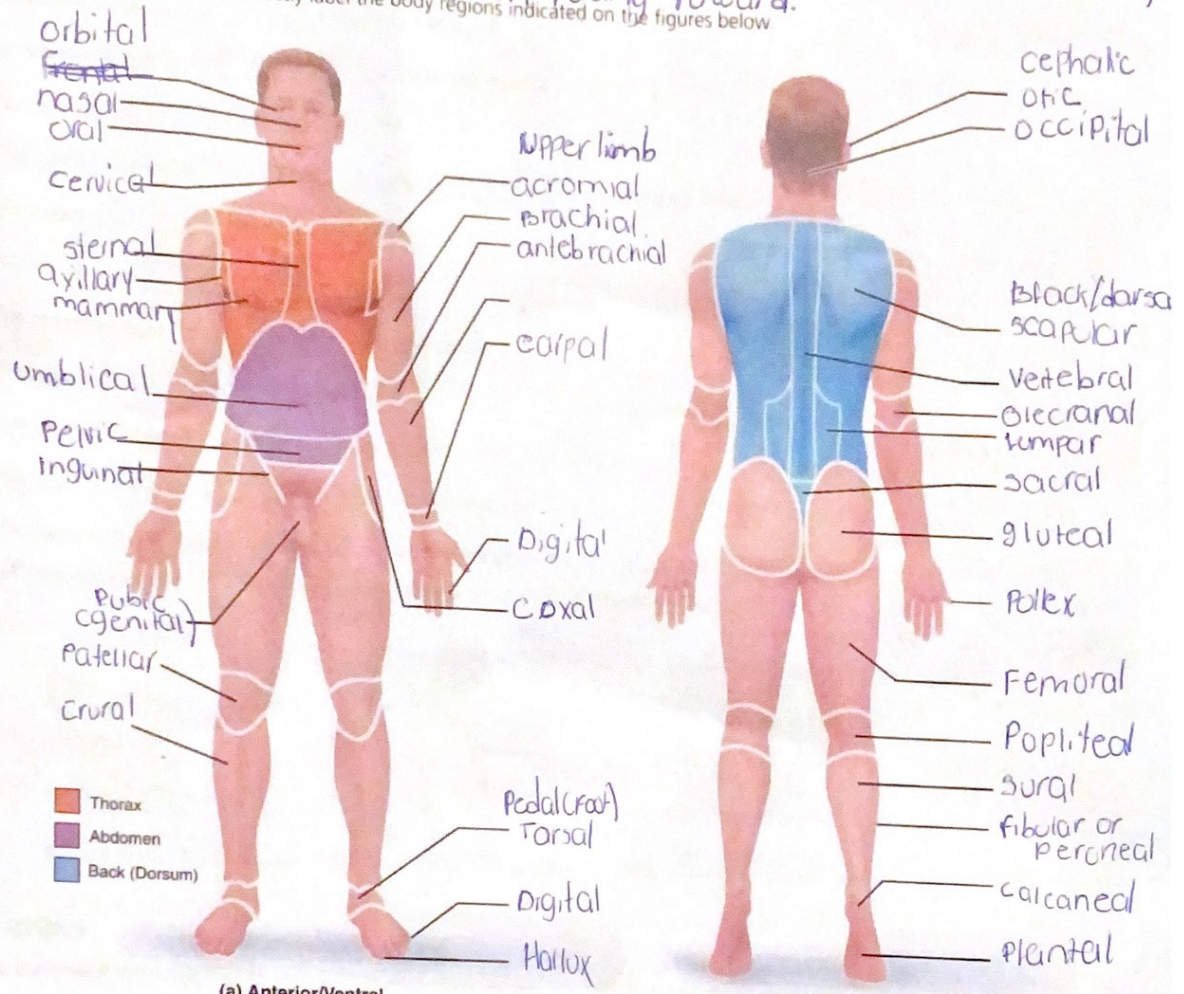
The Language of Anatomy

Name Anny Ortiz

Lab Time/Date 02/14/2021

Regional Terms

- Describe completely the standard human anatomical position. The human body is erect, with the feet only slightly apart, head and toes pointed forward, and arms hanging at the sides with palm facing forward.
- Use the regional terms to correctly label the body regions indicated on the figures below.



(a) Anterior/Ventral

(b) Posterior/Dorsal

Directional Terms, Planes, and Sections

3. Define plane when the section is made through the body wall or through an organ is made along an imaginary surface

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 | |

- The thoracic cavity is superior to the abdominopelvic cavity.
 - The trachea (windpipe) is anterior to the vertebral column.
 - The wrist is proximal to the hand.
 - If an incision cuts the heart into left and right parts, a sagittal plane of section was used.
 - The nose is medial to the cheekbones.
 - The thumb is lateral to the ring finger.
 - The vertebral cavity is posterior to the cranial cavity.
 - The knee is inferior to the thigh.
 - The plane that separates the head from the neck is the transverse plane.
 - The popliteal region is distal to the patellar region.
 - 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



(b) sagittal



(c) transverse

Body Cavities

- Name the muscle that subdivides the ventral body cavity. Diaphragm
- Which body cavity provides the least protection to its internal structures? abdominal
- For the body cavities listed, name one organ located in each cavity.
 - cranial cavity Brain
 - vertebral cavity spinal cord

- 3. thoracic cavity Heart
- 4. abdominal cavity liver
- 5. pelvic cavity urinary bladder
- 6. mediastinum esophagus

9. Name the abdominopelvic region where each of the listed organs is located.

- 1. spleen left Hypochondriac Region
- 2. urinary bladder Hypogastric region
- 3. stomach (largest portion) _____
- 4. cecum right lumbar region

10. Explain how serous membranes protect organs from infection. they protect the organs by producing a thin lubricating fluid that prevents friction and infection from spreading from organ to organ

11. Which serous membrane(s) is/are found in the thoracic cavity? pleura

12. Which serous membrane(s) is/are found in the abdominopelvic cavity? peritoneum

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

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

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

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

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

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? peritoneum

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REVIEW SHEET

USING ANATOMY FOR ALL

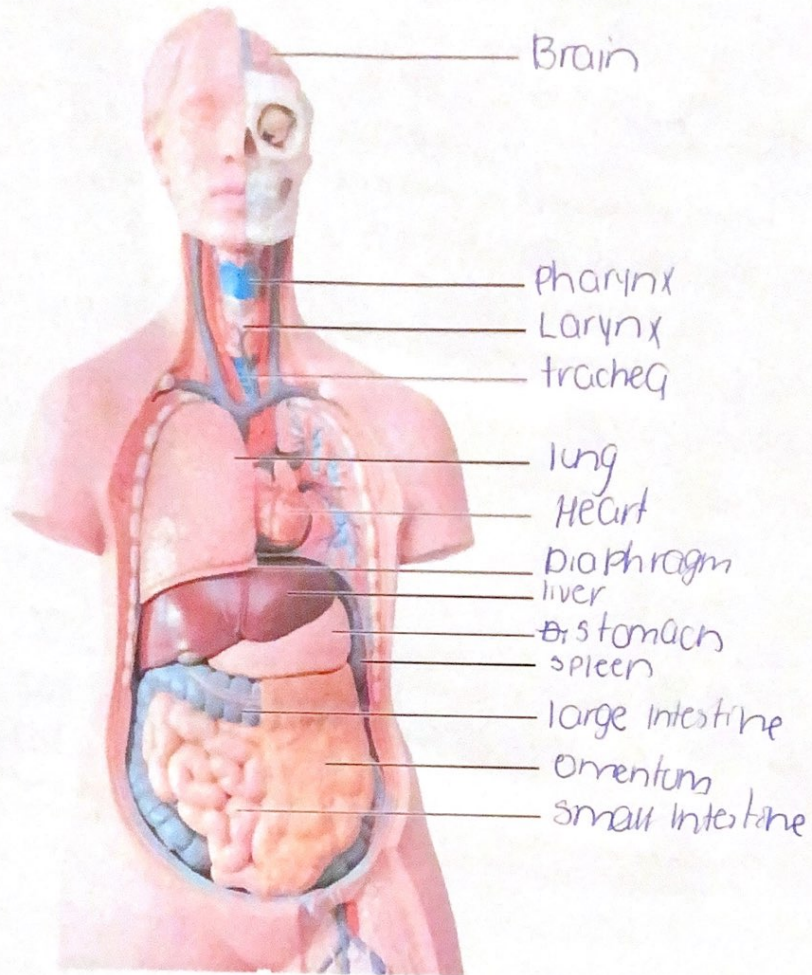
EXERCISE

Organ Systems Overview

Name Anny Ortiz

Lab Time/Date 2/14/2021

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.

- | | | | |
|--------------------|--------------------------------------|--------------------------|--|
| <u>lymphatic</u> | 1. thymus, spleen, lymphatic vessels | <u>integumentary</u> | 5. epidermis, dermis, cutaneous sense organs |
| <u>skeletal</u> | 2. bones, cartilages, tendons | <u>male reproductive</u> | 6. testis, prostate |
| <u>endocrine</u> | 3. pancreas, pituitary gland | <u>digestive</u> | 7. liver, large intestine, rectum |
| <u>respiratory</u> | 4. trachea, bronchi, lungs | <u>urinary</u> | 8. kidneys, ureter, urethra |

3. Name the cells that are produced by the testes and ovaries. Testes produce male sex cells (sperm) and ovaries produce female sex cells.
4. List the four primary tissue types. epithelial tissue, connective tissue, muscle tissue, nervous tissue.
5. Explain why an artery is an organ. An artery is a blood vessel it has a function and it is made by tissues like organ are.
6. Name the two main organ systems that communicate within the body to maintain homeostasis. Briefly explain their different control mechanisms. The nervous and endocrine system both help in maintaining homeostasis. The nervous system rapidly transmits electrical signals to the endocrine system which produces hormones as a response.
7. Explain the role that the skeletal system plays in facilitating cardiovascular system function. In the skeletal system blood cells are formed. Cavities provide a site for blood cell formation.
8. **+** Untreated diabetes mellitus can lead to a condition in which the blood is more acidic than normal. Name two organ systems that play the largest role in compensating for acid-base imbalances. The respiratory and the urinary system help regulate the acid-base balance in the body.
9. **+** The mother of a child scheduled to receive a thymectomy (removal of the thymus gland) asks you whether there will be any side effects from the removal of the gland. Which two organ systems would you mention in your explanation? The two organ system that you would mention are the endocrine system and the lymphatic system.
10. **+** Individuals with asplenia are missing their spleen or have a spleen that doesn't function well. It is recommended that these patients talk to their doctor about vaccines that are indicated for their health condition. Explain how this recommendation correlates to their chronic health condition. The spleen's job is to filter the blood as part of the immune system without that bacteria could enter and cause problems.