Name Samantha Fernandez

Lab Time/Date 2/15/21

EXERCISE 1

The Language of Anatomy

REVIEW SHEET

Surface Anatomy

1. Match each of the numbered descriptions with the related term in the key, and record the key letter or term in front of the description.

Key: a. buccal, b. calcaneal, c. cephalic, d. digital, e. patellar, f. scapular

A 1. cheek

D 2. the fingers

F 3. shoulder blade region

e 4. anterior aspect of knee

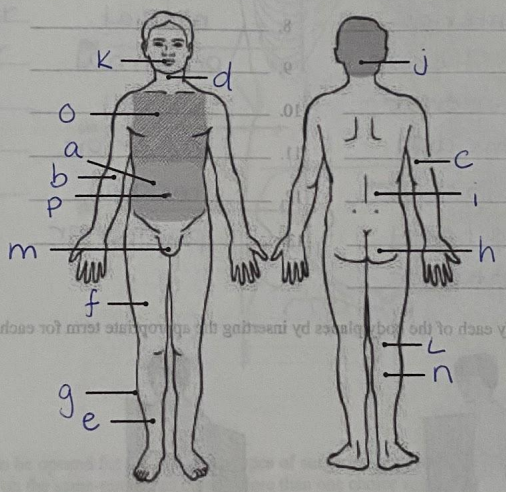
B 5. heel of foot

C 6. the head

2. Indicate the following body areas on the accompanying diagram by placing the correct key letter at the end of each line.

Key:

a. abdominal
b. antecubital
c. brachial
d. cervical
e. crural
f. femoral
g. fibular
h. gluteal
i. lumbar
j. occipital
k. oral
l. popliteal
m. pubic
n. sural
o. thoracic
p. umbilical



3. For each term in the key of question 2 above, determine which of the two major body divisions it belongs to. Insert the appropriate key letters on the answer blanks.

b, c, e, f, g, L, n 1. appendicular

p, O, a, d, h, i, j, k, m 2. axial

Body Orientation, Direction, Planes, and Sections

4. Describe completely the standard human anatomical position. It is when a person is standing straight with their arms to the side, with the palms facing forward in order to be visible.

5. Define *section*. A cut on a plane made through the body wall or an organ.

6. Several incomplete statements appear below. Correctly complete each statement by choosing the appropriate anatomical term from the key. Record the key letters and/or terms on the correspondingly numbered blanks below. Some terms are used more than once.

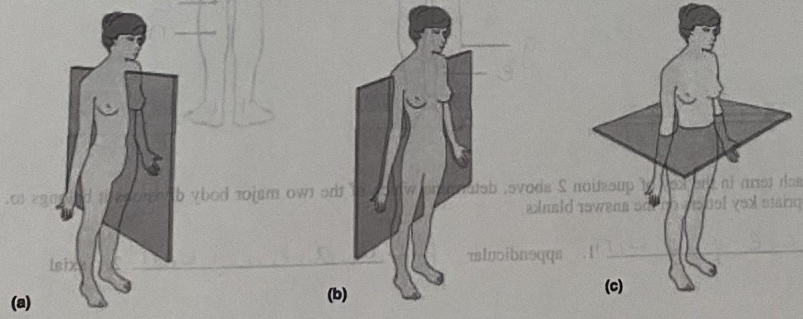
Key: a. anterior, b. distal, c. frontal, d. inferior, e. lateral, f. medial, g. posterior, h. proximal, i. sagittal, j. superior, k. transverse

In the anatomical position, the face and palms are on the _1_ body surface; the buttocks and shoulder blades are on the _2_ body surface; and the top of the head is the most _3_ part of the body. The ears are _4_ and _5_ to the shoulders and _6_ to the nose. The heart is _7_ to the vertebral column (spine) and _8_ to the lungs. The elbow is _9_ to the fingers but _10_ to the shoulder. The abdominopelvic cavity is _11_ to the thoracic cavity and _12_ to the spinal cavity. In humans, the dorsal surface can also be called the _13_ surface; however, in quadruped animals, the dorsal surface is the _14_ surface.

If an incision cuts the heart into right and left parts, the section is a _15_ section; but if the heart is cut so that superior and inferior portions result, the section is a _16_ section. You are told to cut a dissection animal along two planes so that both kidneys are observable in each section. The two sections that meet this requirement are the _17_ and _18_ sections. A section that demonstrates the continuity between the spinal and cranial cavities is a _19_ section.

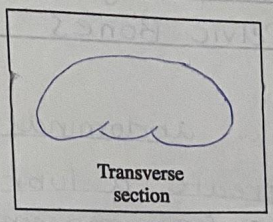
1. anterior
2. posterior
3. Superior
4. medial
5. Superior
6. lateral
7. anterior
8. medial
9. proximal
10. distal
11. inferior
12. medial
13. posterior
14. Superior
15. Sagittal
16. transverse
17. Superior
18. transverse
19. Sagittal

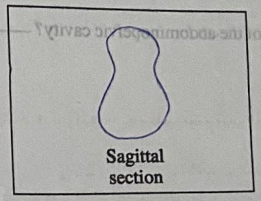
7. Correctly identify each of the body planes by inserting the appropriate term for each on the answer line below the drawing.

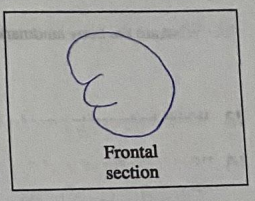


(a) median plane (b) Frontal plane (c) Transverse plane

8. Draw a kidney as it appears when sectioned in each of the three different planes.

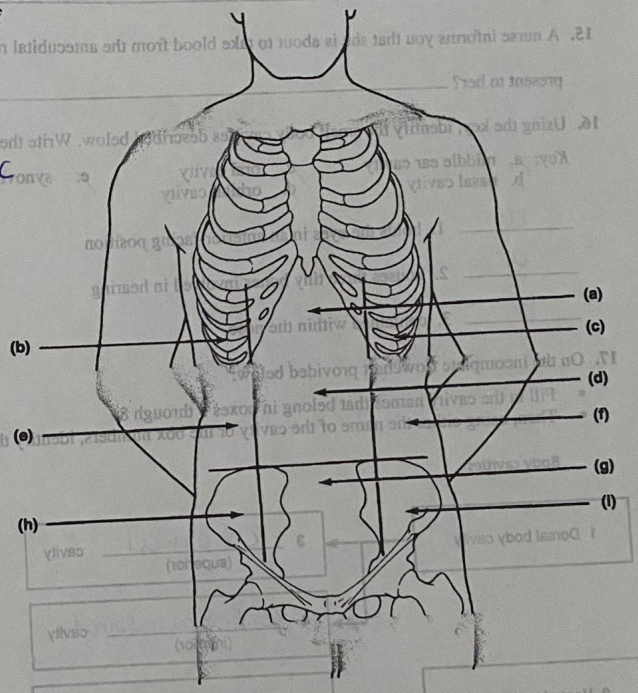






9. Correctly identify each of the nine regions of the abdominopelvic cavity by inserting the appropriate term for each of the letters indicated in the drawing.

a. epigastric
b. Right hypochondriac
c. left hypochondriac
d. umbilical
e. Right lumbar
f. left lumbar
g. pubic
h. Right iliac
i. left liliac



Body Cavities

10. Which body cavities would have to be opened for the following types of surgeries or procedures? (Use the key to find the correct choice, and write the letter on the same-numbered blank. More than one choice applies.)

Key: a. abdominopelvic b. cranial c. dorsal d. spinal e. thoracic f. ventral

e 1. surgery to remove cancerous lung lobe ~~a,f~~ 4. appendectomy
a 2. removal of the uterus, or womb
a 5. stomach ulcer operation
b 3. removal of a brain tumor
d,c 6. delivery of preoperative "saddle" anesthesia

11. Name the muscle that subdivides the ventral body cavity. Diaphragm

12. What are the bony landmarks of the abdominopelvic cavity? Pelvic Bones

13. Which body cavity [illegible] abdominal

14. [illegible] create a lubriating fluid that helps reduces friction from movement.

15. A nurse informs you that she is about to take blood from the antecubital region. What portion of your body should you present to her? _____

16. Using the key, identify the small body cavities described below. Write the correct letter on each blank line.

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

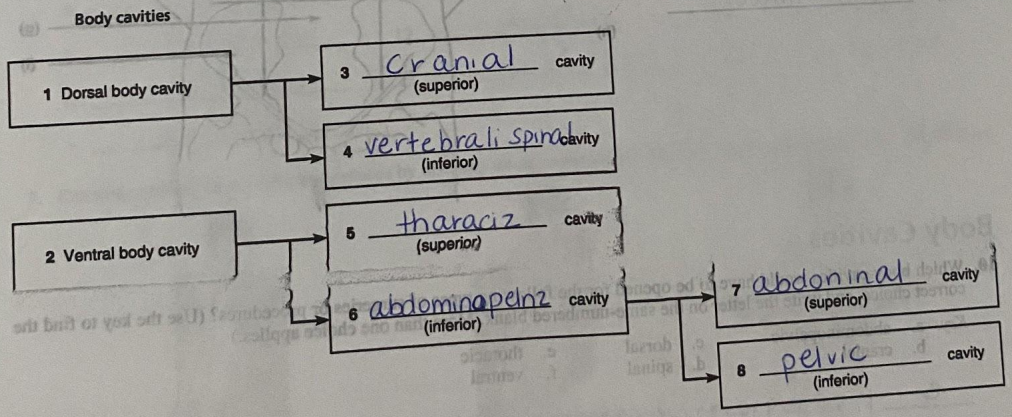
b 3. contained within the nose

c 4. contains the tongue

e 5. surrounds a joint

17. On the incomplete flowchart provided below:

- Fill in the cavity names that belong in boxes 3 through 8.
- Then, using either the name of the cavity or the box numbers, identify the descriptions in the list that follows.



1 a. contained within the skull and vertebral column

8 b. houses female reproductive organs

3 c. the most protective body cavity

2 d. its name means "belly"

5 e. contains the heart

6 f. contains the small intestine

5 g. bounded by the ribs

7 h. its walls are muscular

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EXERCISE 2

REVIEW SHEET

Organ Systems Overview

1. Use the key below to indicate which body systems perform the following functions. (Some responses are used more than once.) Then, circle the organ systems (in the key) that are present in all subdivisions of the ventral body cavity.

Key:
a. cardiovascular
b. digestive
c. endocrine
d. integumentary
e. lymphatic/immune
f. muscular
g. nervous
h. reproductive
i. respiratory
j. skeletal
k. urinary

urinary 1. rids the body of nitrogen-containing wastes

endocrine 2. is affected by removal of the thyroid gland

skeletal 3. provides support and the levers on which the muscular system acts

cardiovascular 4. includes the heart

integumentary 5. protects underlying organs from drying out and from mechanical damage

lymphatic/immune 6. protects the body; destroys bacteria and tumor cells

digestive 7. breaks down ingested food into its building blocks

respiratory 8. removes carbon dioxide from the blood

cardiovascular 9. delivers oxygen and nutrients to the tissues

muscular 10. moves the limbs; facilitates facial expression

digestive 11. regulates water balance and removes nitrogen-containing wastes from the body

endocrine and reproductive 12. facilitate conception and childbearing

endocrine 13. controls the body by means of chemical molecules called hormones

integumentary 14. is damaged when you cut your finger or get a severe sunburn

2. Using the key above, choose 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, adrenal glands

respiratory 4. trachea, bronchi, lungs

integumentary 5. epidermis, dermis, cutaneous sense organs

reproductive 6. testis, ductus deferens, urethra

digestive 7. esophagus, large intestine, rectum

muscular 8. muscles of the thigh, postural muscles

3. Using the key, place the following organs in their proper body cavity. Letters may be used more than once.

Key: a. abdominopelvic – b. cranial c. spinal – d. thoracic –

abdominopelvic 1. stomach abdominopelvic 4. liver thoracic 7. heart

thoracic 2. esophagus Spinal 5. spinal cord thoracic 8. trachea

abdominopelvic 3. large intestine abdominopelvic 6. urinary bladder abdominopelvic 9. rectum

4. Using the organs listed in question 3 above, record, by number, which would be found in the abdominopelvic regions listed below.

6 1. hypogastric region 1 4. epigastric region

3 2. right lumbar region 3 5. left iliac region

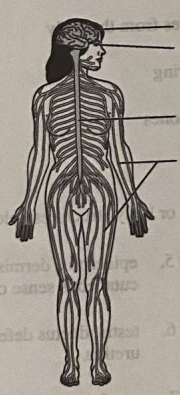
1 3. umbilical region 4 6. left hypochondriac region

5. The levels of organization of a living body include: cellular, tissue, organ, organ system, and organism.

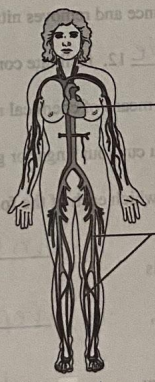
6. Define *organ*. A structure that manages different functions.

7. Using the terms provided, correctly identify all of the body organs indicated with leader lines in the drawings below. Then name the organ systems by entering the name of each on the answer blank below each drawing.

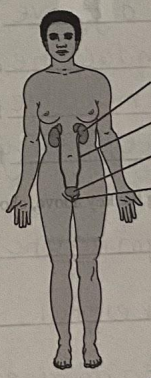
Key: blood vessels – brain – heart – kidney – nerves – sensory receptor – spinal cord – ureter – urethra – urinary bladder –



a. Nervous System



b. Cardiovascular



c. Urinary System

8. Why is it helpful to study the external and internal structures of the rat? The composition of the rat has similar structures to the human body which can give us a better understanding.