NAME Shanalee Jones

LAB TIME/DATE _____

REVIEW SHEET

EXERCISE 1

The Language of Anatomy

Surface Anatomy

1. Match each of the following descriptions with a key equivalent, 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

buccal 1. cheek

digital 2. pertaining to the fingers

Scapular 3. shoulder blade region

patellar 4. anterior aspect of knee

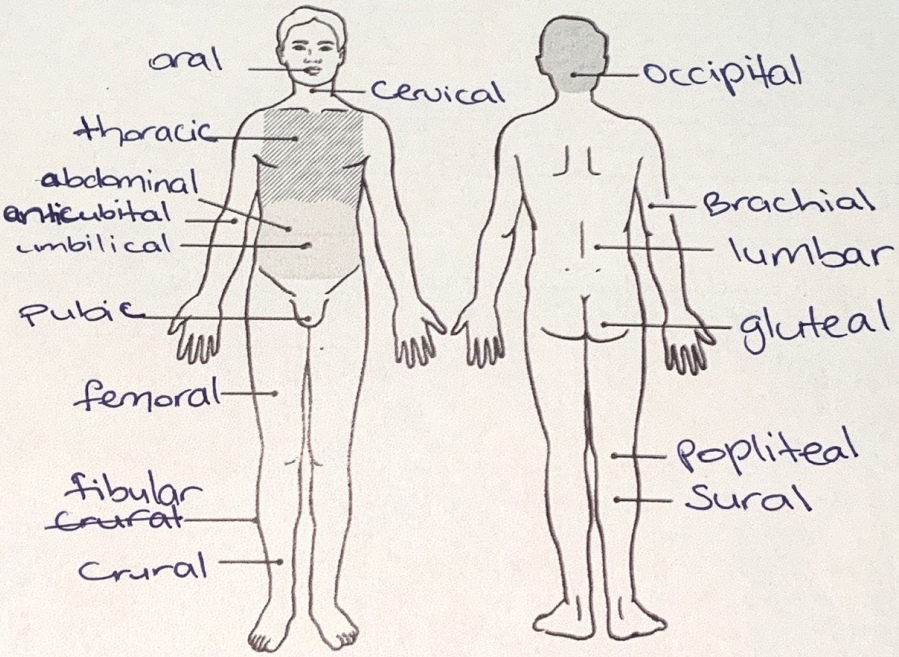
calcaneal 5. heel of foot

cephalic 6. pertaining to 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. Classify each of the terms in the key of question 2 above into one of the large body regions indicated below. Insert the appropriate key letters on the answer blanks.

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

d, i, j, k, o, 2. axial

Body Orientation, Direction, Planes, and Sections

4. Describe completely the standard human anatomical position. as above where arms are at sides with palms facing forward and feet are together.

5. Define *section*. a slice through the body (3 dimentional object)

6. Several incomplete statements are listed 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.

Key:

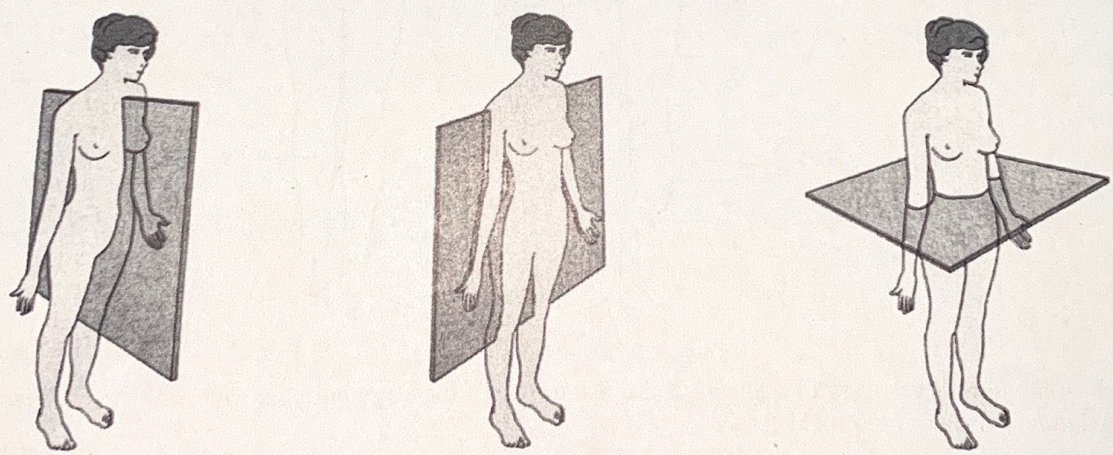
a. anterior	d. inferior	g. posterior 2	j. superior
b. distal	e. lateral 1	h. proximal	k. transverse
c. frontal	f. medial	i. sagittal	

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 will always 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. lateral
2. ~~posterior~~
3. ~~superior~~
4. superior
5. medial
6. lateral
7. anterior
8. medial
9. Proximal
10. distal
11. inferior
12. anterior
13. Posterior
14. superior
15. Sagittal
16. transverse
17. frontal
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.

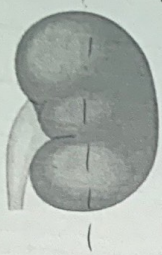


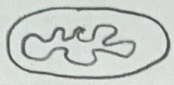
(a) Sagittal

(b) frontal

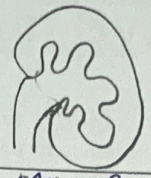
(c) transverse

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

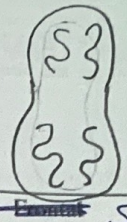




Transverse section



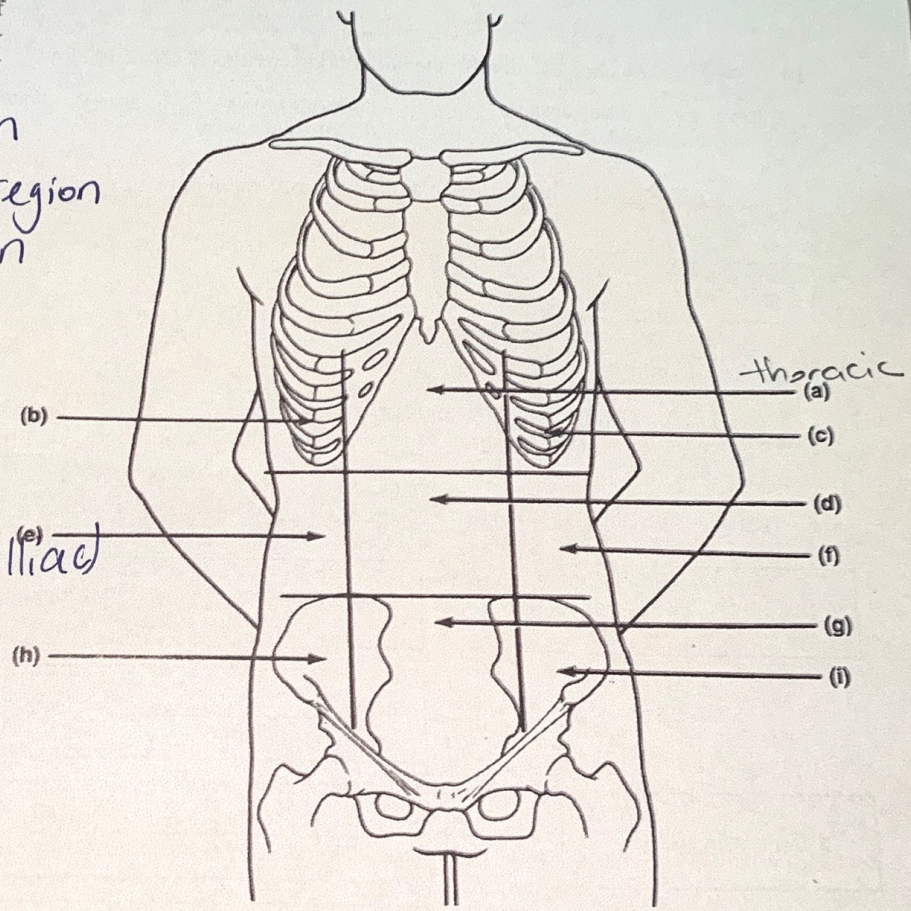
~~Sagittal~~ frontal section



~~Frontal~~ Sagittal section

9. Correctly identify each of the nine areas of the abdominal surface by inserting the appropriate term for each of the letters indicated in the drawing.

a. Epigastric Region
b. Right Hypochondriac region
c. Left Hypochondriac Region
d. Umbilical Region
e. Right Lumbar Region
f. Left lumbar Region
g. Hypogastric Region
h. Right inguinal Region (illiac)
i. Left inguinal Region



Body Cavities

10. Which body cavity would have to be opened for the following types of surgery or procedures? (Insert letter of key choice in same-numbered blank. More than one choice may apply.)

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

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

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

12. Which organ system would not be represented in any of the body cavities? muscular, skeletal, integumentary

13. What are the bony landmarks of the abdominopelvic cavity? Spine and pelvic bones

14. Which body cavity affords the least protection to its internal structures? abdominal

15. What is the function of the serous membranes of the body? Secretes watery fluid that coats & lubricates opposing surfaces to reduce friction as organs carry out their normal functions

16. 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

orbital d 1. holds the eyes in an anterior-facing position

middle a ear 2. houses three tiny bones involved in hearing

nasal b 3. contained within the nose

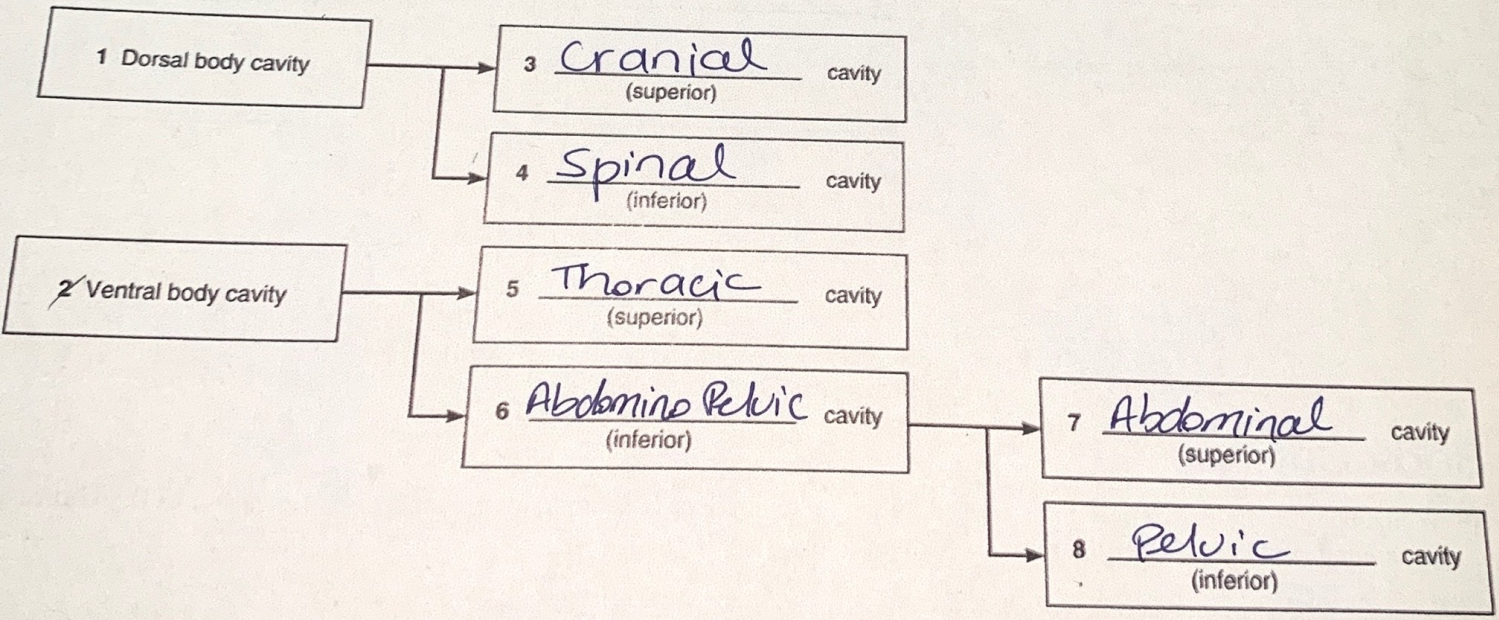
c. oral 4. contains the tongue

e. Synovial 5. lines a joint cavity

17. On the incomplete flowchart provided below:

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

Body cavities



Spinal a. contained within the skull and vertebral column

Pelvic b. houses female reproductive organs

cranial c. the most protective body cavity

ventral d. its name means belly

Thoracic e. contains the heart

Abdominal f. contains the small intestine

thoracic g. bounded by the ribs

abdominal h. its walls are muscular

NAME Shanalu Jones

LAB TIME/DATE

REVIEW SHEET EXERCISE 2

Organ Systems Overview

1. Use the key below to indicate the body systems that perform the following functions for the body. 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/immunity 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 levers on which the muscular system acts

cardiovascular 4. includes the heart

reproductive 5. causes the onset of the menstrual cycle

integumentary 6. protects underlying organs from drying out and from mechanical damage

Lymphatic 7. protects the body; destroys bacteria and tumor cells

digestive 8. breaks down ingested food into its building blocks

respiratory 9. removes carbon dioxide from the blood

Cardiovascular 10. delivers oxygen and nutrients to the tissues

muscular 11. moves the limbs; facilitates facial expression

urinary 12. conserves body water or eliminates excesses

Reproductive and Endocrine 13. facilitate conception and childbearing

Endocrine 14. controls the body by means of chemical molecules called hormones

integumentary 15. is damaged when you cut your finger or get a severe sunburn

2. Using the above key, 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, adrenals

Respiratory 4. trachea, bronchi, alveoli

integumentary 5. epidermis, dermis, and 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 below, place the following organs in their proper body cavity.

Key:

a. abdominopelvic b. cranial c. spinal d. thoracic

abd. Pelvic 1. stomach
thoracic 2. esophagus
abd. pelvic 3. large intestine
abd. Pelvic 4. liver
Cranial + Spinal 5. spinal cord
abd. pelvic 6. urinary bladder
thoracic 7. heart
thoracic 8. trachea
abd. pelvic 9. rectum

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

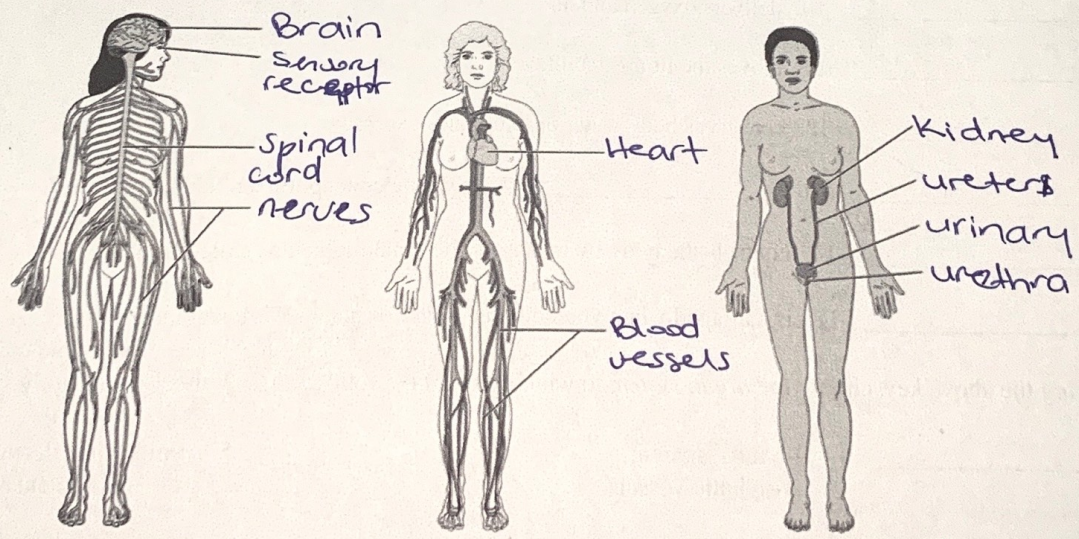
6, 4, 1. hypogastric region
3, 4 2. right lumbar region
1, 3 3. umbilical region
1, 4 4. epigastric region
3, 5. left iliac region
1 6. left hypochondriac region

5. The levels of organization of a living body are chemical, cellular, Tissue, organs, organ system, and organism.

6. Define *organ*. two or more tissues working together to carry out a specific function or functions.

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

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



a. Nervous System b. Cardiovascular Sys. c. Urinary System

8. Why is it helpful to study the external and internal structures of the rat? Many ~~the~~ structures of the Rat are similar in structure & function to those of the human body and so should aid in understanding our own physical structure and function.