

Name Shane Batts

Lab Time/Date \_\_\_\_\_

EXERCISE

2

# Organ Systems Overview

REVIEW SHEET

1. Use the key below to indicate the body systems that perform the following functions for the body; note that some body systems 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      d. integumentary      g. nervous      j. skeletal  
b. digestive      e. lymphatic/immunity      h. reproductive      k. urinary  
c. endocrine      f. muscular      i. respiratory

- 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. has a menstrual cycle in females
- integumentary \_\_\_\_\_ 6. protects underlying organs from drying out and from mechanical damage
- Lymphatic/immunity \_\_\_\_\_ 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 \_\_\_\_\_ 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      Integumentary 5. epidermis, dermis, and cutaneous sense organs
- skeletal 2. bones, cartilages, tendons
- Reproductive 6. testis, ductus deferens, urethra
- Endocrine 3. pancreas, pituitary, adrenals
- Digestive 7. esophagus, large intestine, rectum
- Respiratory 4. trachea, bronchi, lungs      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
- |                             |                             |                     |
|-----------------------------|-----------------------------|---------------------|
| <u>A</u> 1. stomach         | <u>A</u> 4. liver           | <u>D</u> 7. heart   |
| <u>D</u> 2. esophagus       | <u>C</u> 5. spinal cord     | <u>D</u> 8. trachea |
| <u>A</u> 3. large intestine | <u>A</u> 6. urinary bladder | <u>A</u> 9. rectum  |

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

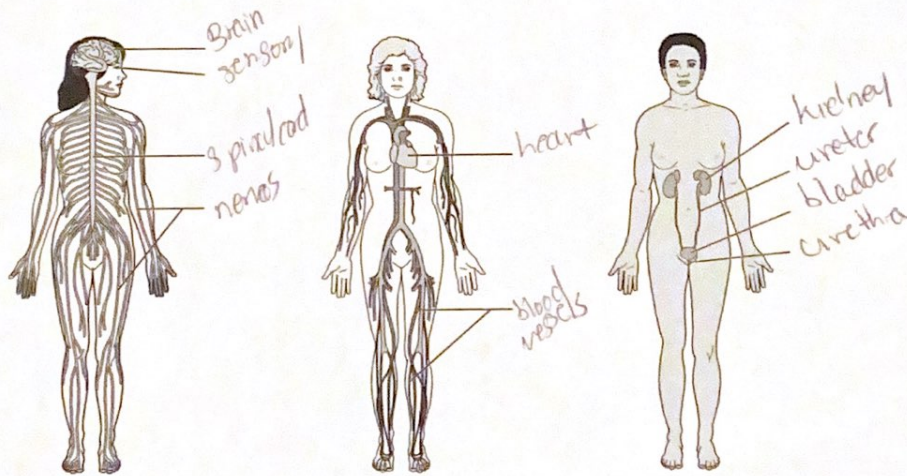
- |                                      |  |
|--------------------------------------|--|
| <u>5, 6, 9</u> 1. hypogastric region | <u>4, 5, 7, 8</u> 4. epigastric region |
| <u>3</u> 2. right lumbar region      | <u>3</u> 5. left iliac region          |
| <u>5, 3</u> 3. umbilical region      | <u>1</u> 6. left hypochondriac region  |

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

6. Define organ. A group of tissues that ~~are~~ work together to perform a body function

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      b. cardiovascular      c. urinary

8. Why is it helpful to study the external and internal structures of the rat? They resemble the external & internal structures of a human.