

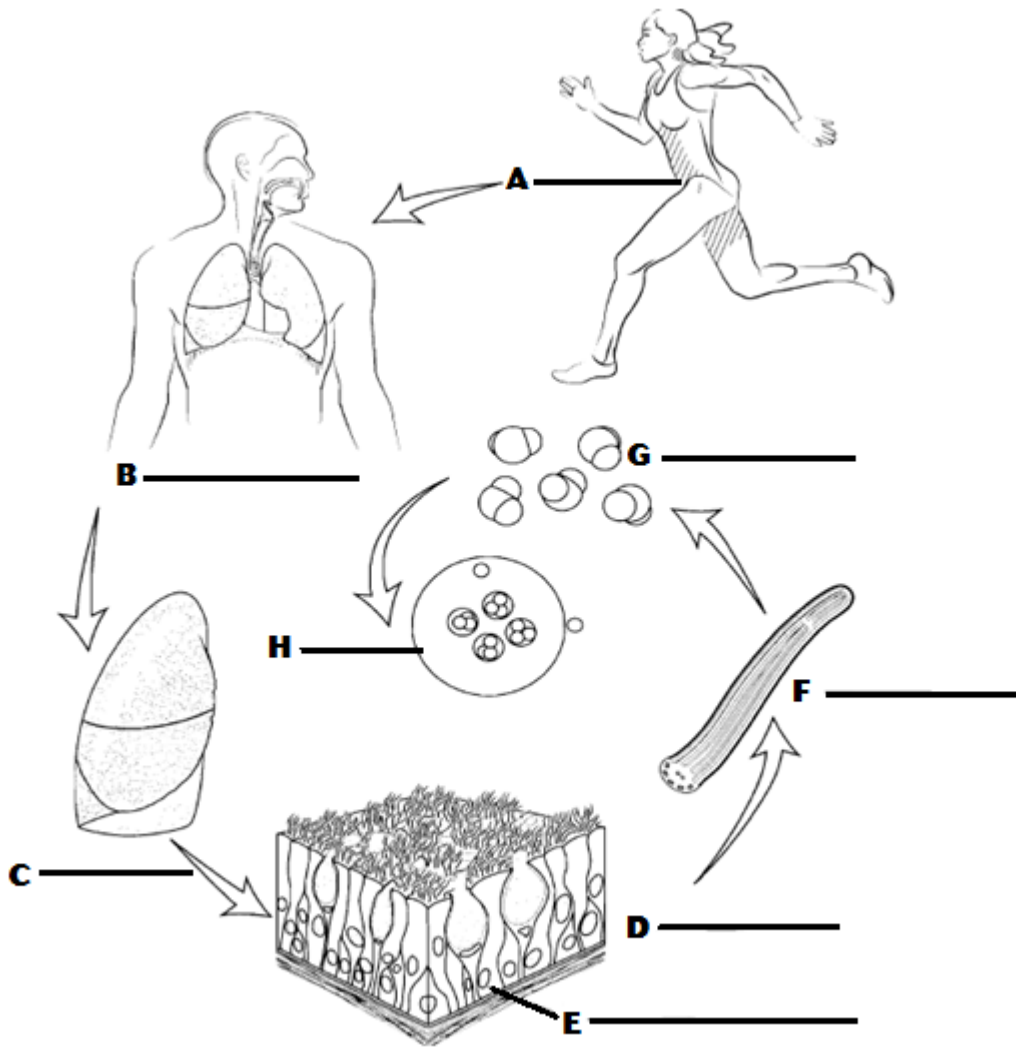
# LAB REPORT

# Exercise 2

## Organs, Systems, and Organization of the Body

### Activity 1: Levels of Organization

Part A. Correctly identify the levels of organization and name the specific representative illustrated below.



### Activity 2: Organ Systems

Part A. Refer to figure 2.2. Name the organ system represented by each example:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_

**Part B.** Place the organs in the appropriate organ system listed below.

Aorta	Skull	Brain	Small intestine	Heart
Kidneys	Spleen	Liver	Stomach	Lungs
Ovaries	Tonsils	Pancreas	Trachea	Skeletal muscle
Uterus	Spinal cord	Testes	Skin	Bladder

Integumentary system \_\_\_\_\_

Skeletal system \_\_\_\_\_

Muscular system \_\_\_\_\_

Nervous system \_\_\_\_\_

Endocrine system \_\_\_\_\_

Cardiovascular system \_\_\_\_\_

Lymphatic system \_\_\_\_\_

Respiratory system \_\_\_\_\_

Digestive system \_\_\_\_\_

Urinary system \_\_\_\_\_

Male reproductive system \_\_\_\_\_

Female reproductive system \_\_\_\_\_

**Part C.** Review your groupings in Part B and identify any organs that appear in more than one organ system. Comment on the functional significance of organs having a role in more than one system.

**Part D.** Match each organ system with its correct function(s):

- |   |                          |
|---|--------------------------|
| _____ 1. Protects the body from the disease-causing agents                                  | A. integumentary system  |
| _____ 2. Involved with production of sex cells and fetus development                        | B. skeletal system       |
| _____ 3. Responsible for gas exchange between the blood and the air                         | C. muscular system       |
| _____ 4. Protects the body from microbes, losing water, and helps to cool the body          | D. nervous system        |
| _____ 5. Responsible for transport of substances throughout the body                        | E. endocrine system      |
| _____ 6. Provides nutrients and water to the body   | F. cardiovascular system |
| _____ 7. Maintains the chemical balance of body fluids                                      | G. lymphatic system      |
| _____ 8. Supports and protects organs, and produces blood cells                             | H. respiratory system    |
| _____ 9. Coordinates body functions, and integrates information                             | I. digestive system      |
| _____ 10. Maintains a constant internal body condition and regulates growth and development | J. urinary system        |
| _____ 11. Moves the body and generates heat   | K. reproductive system   |

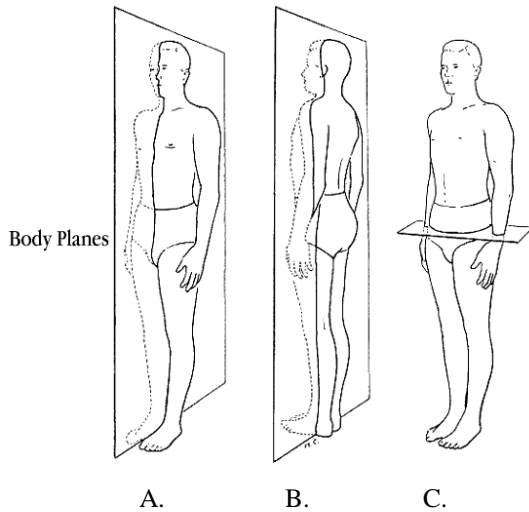
**Activity 3: Directional Terms**

**Part A.** Refer to Table 2.1. Give the correct directional term for each statement below:

1. A part of the body pertaining to the front of the body is \_\_\_\_\_.
2. Organ that is closer to the midline of the body is said to be \_\_\_\_\_.
3. The diaphragm is \_\_\_\_\_ to lungs.
4. Liver is \_\_\_\_\_ to skin.
5. The hand is \_\_\_\_\_ to the elbow.
6. In humans, the heart is anterior or \_\_\_\_\_ to the spinal cord.
7. The kidneys are \_\_\_\_\_ to the spine.
8. The ankle is \_\_\_\_\_ to the foot in any position of the body.
9. In a dog, the chest is \_\_\_\_\_ to the spine.
10. In a human, the chest is \_\_\_\_\_ to the spine.

**Activity 4 Body Planes and Body Cavities**

**Part A.** Identify each given body plane:



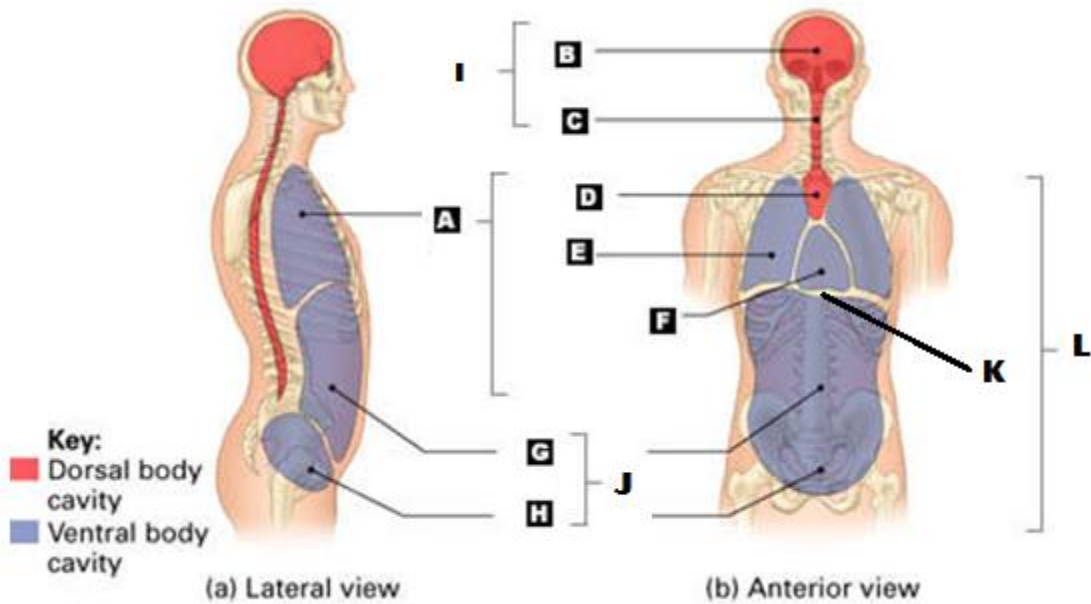
- A. \_\_\_\_\_  
 B. \_\_\_\_\_  
 C. \_\_\_\_\_

**Part B.** Draw the appearance of each of the sections after cutting the given specimen: \_\_\_\_\_

<i>Transverse (horizontal) cut</i>	<i>Coronal (frontal) cut</i>	<i>Sagittal cut</i>
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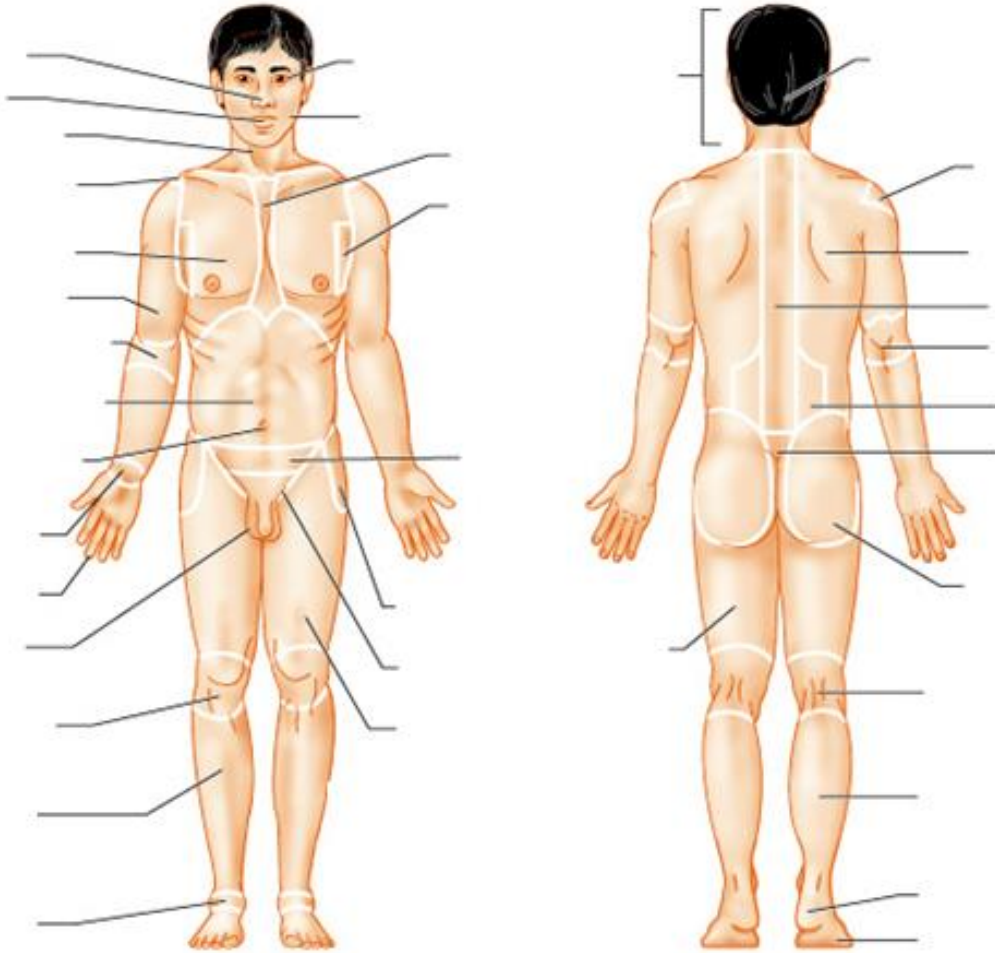
**Part C.** Match the letters with correct body cavities

- |                         |                                |                            |
|-------------------------|--------------------------------|----------------------------|
| Cranial cavity ____     | Vertebral (spinal) cavity ____ | Pelvic cavity ____         |
| Thoracic cavity ____    | Abdominal cavity ____          | Pleural cavity ____        |
| Pericardial cavity ____ | Mediastinum ____               | Diaphragm ____             |
| Ventral cavity ____     | Dorsal cavity ____             | Abdominopelvic cavity ____ |



**Activity 5: Body Regions**

**Part A.** Use anatomical terms to name the indicated body regions.



**Part B.** Refer to the textbook, if needed, to locate the major muscles of the body, then name the region of the body where the given muscles are found.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

1. Pectoralis major
2. Trapezius
3. External obliques (in front)
4. Rectus femoris
5. Gastrocnemius
6. Gluteus maximus
7. Flexor carpi radialis
8. Triceps brachii
9. Latissimus dorsi

**Activity 6: Abdominal Regions**

**Part A.** Refer to figure 2.8. Write down abdominal region that contains the organ:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

1. Liver
2. Urinary bladder
3. Small intestine
4. Descending colon
5. Left kidney