

Week 1 Lab Instructions

Organization of the Body

Activity	Deliverable	Points
Part A	Activity: Anatomical Terminology	10
Part B	Activity: Regions, Cavities, and Systems	10
Part C	Lab Worksheet (Questions)	10

Part A

Step 1: Read the Entire Lab Packet

1.0– Read through the laboratory packet – SEE ATTACHED SHEETS

Part A

Step 2: Come to the Lab with Proper Protective Equipment (Closed-toed shoes)

BACKGROUND:

Anatomy focuses on the study of body structures and their organization, while Physiology examines how these structures function. These two disciplines are often studied together because the relationship between structure and function is fundamental to understanding basic life processes. A key tool in anatomical study is the anatomical position, which describes the body standing erect with arms at the sides, palms facing forward, and feet slightly apart. This standard position serves as a reference point for navigating the body and accurately describing locations.

Using anatomical positioning, we apply directional terms—such as superior, inferior, anterior, posterior, lateral, and medial—to describe specific locations relative to one another. Additionally, we can reference body planes, including the frontal (coronal), transverse, and sagittal planes, to further divide and explore the body's structure.

Understanding the language of anatomy also includes studying body regions and cavities, such as the dorsal, ventral, thoracic, and abdominopelvic cavities. These cavities house organs and are lined with serous membranes, which also cover the organs they contain. The body can be divided into quadrants or regions, and within these divisions, groups of organs—organized into systems—work together to perform various vital functions.

PURPOSE:

In this lab, you will be asked to use models in the lab to practice anatomical language. You will also locate different body regions, cavities, organs, and organ systems.

MATERIALS:

- A copy of the lab report for each member of your group
- A writing utensil
- Laboratory models, as assigned by your instructor

PREPARATION:

- Read your lab in its entirety before coming to class.
- Clear your workstation of all unnecessary materials. Book bags and or purses should be hung on hooks or places at the front of class. Make sure all other unnecessary materials (coats, drink containers, unused textbooks, etc.) are all stored and placed in a safe area out of the way.
- Obtain all materials listed above.
- Familiarize yourself with your lab materials.
- Follow the directions of the packet and as presented by your instructor.
- Be aware of the instructions for documenting your lab work. You will be performing the lab in a group, but will each be responsible for recording your own data and creating your own lab report.

ACTIVITIES:

Part A: Anatomical Terminology (10 points)

With a partner or your lab group, define and provide an example of each anatomical term in the table below.

Term	Meaning	Example
Ventral	Towards the front or belly	The sternum is ventral to the heart
Dorsal	Towards the back or spine	The heart is dorsal to the sternum
Anterior	Towards the ventral side	The ribcage is anterior to the lungs
Posterior	Towards the dorsal side	The esophagus is posterior to the trachea
Superior	Above	The heart is superior to the diaphragm
Inferior	Below	The stomach is inferior to the lungs
Medial	Toward the median plane	The heart is medial to the lungs
Lateral	Away from the median plane	They eyes are lateral to the nose