BIOS15: LAB MANUAL



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BIOS15 Lab Manual

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TABLE OF CONTENTS

Acknowledgements

About the Author

Licensing

1: Language of Anatomy

- 1.1: Introduction to Anatomical Terms
- 1.2: Surface and Regional Anatomy
- 1.3: Body Orientation and Direction
- 1.4: Planes and Sections
- 1.5: Body Cavities
- 1.6: Reviewing Anatomical Language

2: Membrane Transportation

- 2.1: Introduction to Membrane Transportation
- 2.2: Diffusions of Crystals through an Agar Gel
- 2.3: Osmosis
- 2.4: Practice Graphing
  - 2.4.1: Practice Graph Results
- 2.5: Procedure for Osmosis Experiment
- 2.6: Results for Diffusion and Osmosis Experiments
  - 2.6.1: Graph for your Osmosis Experiment

3: Microscopy

- 3.1: Introduction to Microscopy
- 3.2: Microscope Components
- 3.3: Microscope Handling and Care
- 3.4: Total Magnification
- 3.5: Field of View
- 3.6: Practicing Microscopy
- 3.7: Practice Labelling the Microscope

4: Epithelial and Connective Tissues

- 4.1: Introduction to Tissues
- 4.2: Epithelial Tissues
- 4.3: Connective Tissues
- 4.4: Microscope Slides - Epithelial and Connective Tissue
- 4.5: Questions and Review - Epithelial and Connective Tissues

5: The Axial and Appendicular Skeleton with Joint Movement

- 5.1: Introduction to the Skeletal System
- 5.2: Microscope Slides - Compact Bone
- 5.3: The Skull
- 5.4: The Vertebral Column

- 5.5: The Thorax
- 5.6: Bones of the Pectoral Girdle and Upper Limbs
- 5.7: Bones of the Pelvic Girdle and Lower Limbs
- 5.8: Joint Movement
- 5.9: Questions and Review - Skeletal System and Joints

6: Muscle Tissue

- 6.1: Introduction to Muscle Tissue
- 6.2: Structures of Muscle Tissue
- 6.3: Microscope Slides - Muscle Tissue
- 6.4: Questions and Review - Muscle Tissue

7: Axial and Appendicular Skeletal Muscles

- 7.1: Introduction to Skeletal Muscle
- 7.2: Muscles of the Head and Neck
- 7.3: Muscles of the Axial Skeleton
- 7.4: Muscles of the Upper Limb
- 7.5: Muscles of the Hip and Lower Limb
- 7.6: Questions and Review - Skeletal Muscles

8: Nervous System

- 8.1: Introduction to the Nervous System
- 8.2: Neuron Anatomy
- 8.3: Brain Anatomy - Cerebrum and Cerebellum
- 8.4: Brain Anatomy - Diencephalon and Brain Stem
- 8.5: Cranial Nerves
- 8.6: Spinal Cord Anatomy
- 8.7: Microscope Slides - Brain and Spinal Cord
- 8.8: Sheep Brain Dissection
- 8.9: Questions and Review - Nervous System

9: Reflexes

- 9.1: Introduction to Reflexes
- 9.2: Reflex Tests
- 9.3: Questions and Review - Reflexes

10: Special Senses - Eyes and Ears

- 10.1: Introduction to Eyes and Ears
- 10.2: Eye Anatomy
- 10.3: Cow Eye Dissection
- 10.4: Ear Anatomy
- 10.5: Microscope Slides - Eyes and Ears
- 10.6: Questions and Review - Eyes and Ears

11: General and Special Sensory Tests

- 11.1: Introduction to General and Special Sensory Tests
- 11.2: Sensory Tests on the Eye
- 11.3: Sensory Tests on the Ears
- 11.4: General Sensory Tests

- 11.5: Results of Sensory Tests

12: Endocrine System

- 12.1: Introduction to the Endocrine System
- 12.2: Microscope Slides - Endocrine Glands
- 12.3: Questions and Review

13: Blood

- 13.1: Introduction to Blood
- 13.2: Types of Blood Cells
- 13.3: Microscope Slides - Blood Cells
- 13.4: Hematocrit
- 13.5: Blood Typing
- 13.6: Results and Questions

14: Heart Anatomy

- 14.1: Introduction to the Heart
- 14.2: Heart Anatomy
- 14.3: Sheep Heart Dissection
- 14.4: Questions and Review

15: Electrocardiograms (ECGs/EKGs)

- 15.1: Introduction to Heart Electrophysiology
- 15.2: Instructions for Recording an ECG
- 15.3: ECG Results and Review

16: Blood Pressure

- 16.1: Introduction to Blood Pressure Measurements
- 16.2: Instructions for Measuring Blood Pressure
- 16.3: Results and Questions

17: Respiration and Spirometry

- 17.1: Introduction to Respiration
- 17.2: Respiratory System Anatomy
- 17.3: Microscope Slides - Respiratory System
- 17.4: Spirometry and Measuring Lung Capacity
- 17.5: Questions and Review

Index

Glossary

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Detailed Licensing

Acknowledgements

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CHAPTER OVERVIEW

1: Language of Anatomy

1.1: Introduction to Anatomical Terms
1.2: Surface and Regional Anatomy
1.3: Body Orientation and Direction
1.4: Planes and Sections
1.5: Body Cavities
1.6: Reviewing Anatomical Language

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1.1: Introduction to Anatomical Terms

Learning Objectives

After completing this lab report, you should be able to:

- Describe and demonstrate the anatomical position
- Use anatomical terms to describe body landmarks, direction, planes, and surfaces.
- Name the body cavities and name important organs in each cavity.

Anatomical Position

In anatomical position, a person stands upright, facing forward with their arms on the side of the body. Their palms facing towards the front and their are slightly apart, and with their toes facing forward. It is important to have a standardized way to describe body positions. Anatomical position and terms provide clear descriptions to locate different parts of the body. They are also useful when describing where injuries, wounds or damage to the body's structures may be located. Please be aware that when you are facing someone (the subject or a patient) who is in the anatomical position, your left and right is opposite from the subject's left and right.

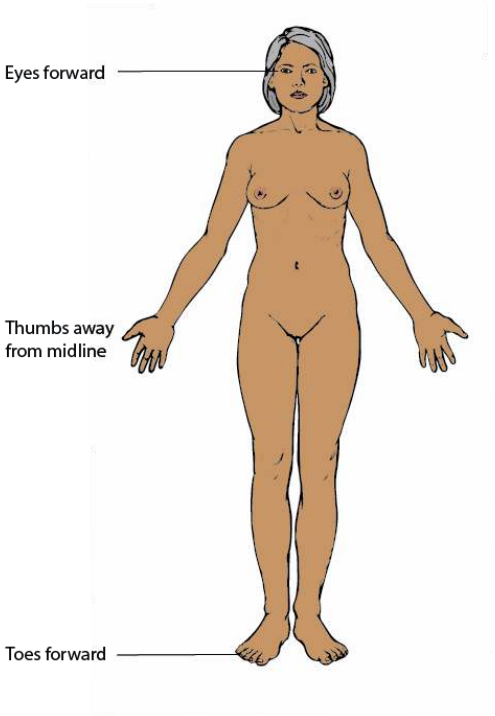


Figure 1.1.1 Anatomical Position: A person standing in anatomical position, facing forward. *(Image credit: "Anatomical Position" by Sofia Elizondo is licensed under CC BY-NC-SA 4.0.)*

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1.2: Surface and Regional Anatomy

Surface and Regional Anatomy

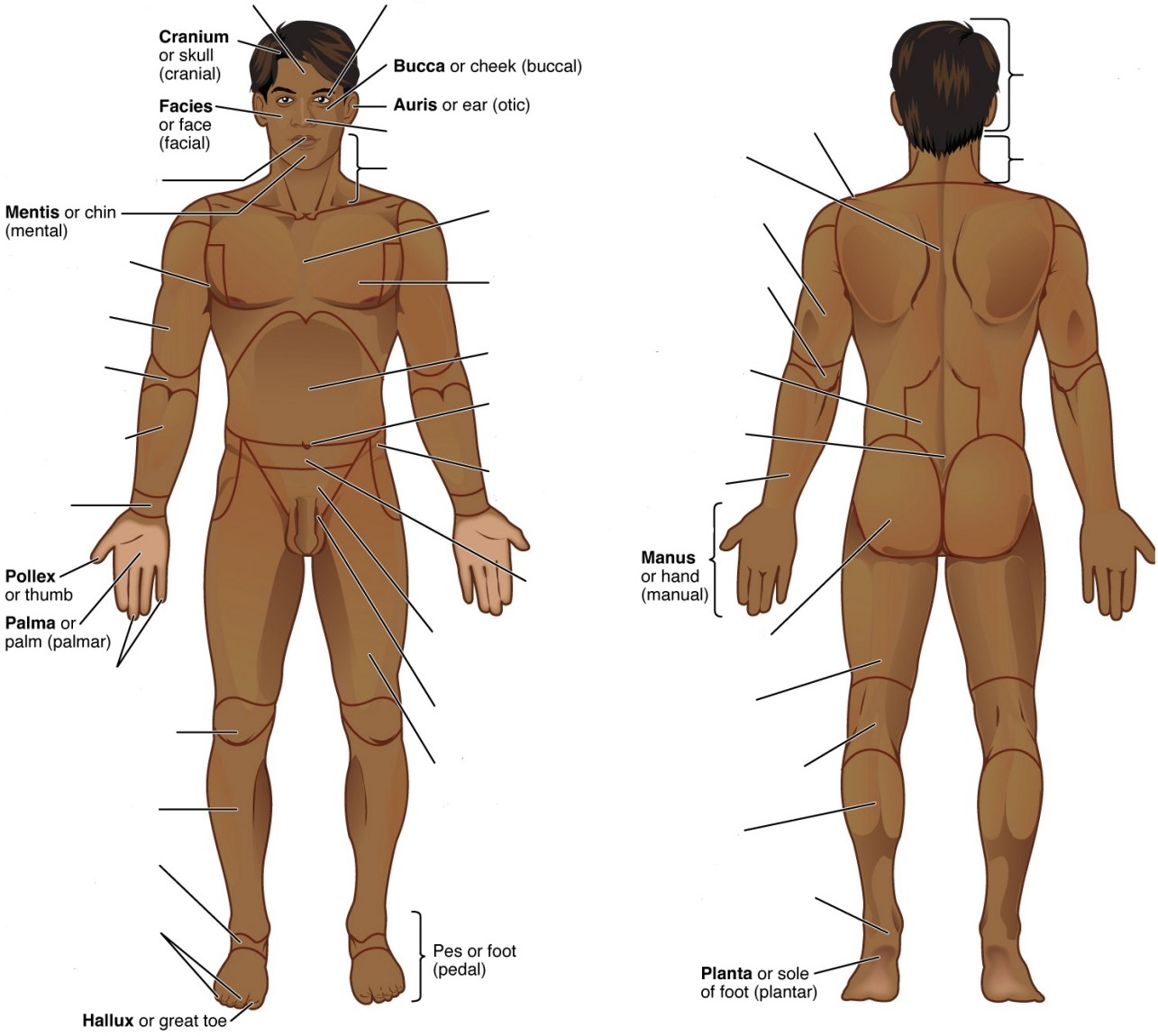
The best way to study different areas of the body is to understand the visible landmarks or regions on the surface of the body. The commonly used landmarks or regional terms are described in Table 1.

Table 1.: Anterior and posterior body landmarks or regions

Abdominal:	inferior to chest & superior to pelvis		**Lumbar:**	area of the back between the ribs and hips (lower back)
Antebrachial:	forearm		**Mammary:**	breast
Antecubital:	anterior surface of elbow		**Occipital:**	base of the skull
Axillary:	armpit		**Olecranal:**	back of elbow
Brachial:	arm		**Oral:**	mouth
Calcaneal:	heel		**Orbital:**	eye socket
Carpal:	wrist		**Patellar:**	anterior knee region
Cephalic:	head		**Pectoral:**	anterior chest
Cervical:	neck region		**Pelvic:**	pelvis region
Coxal:	hip		**Popliteal:**	back of the knee
Crural:	leg		**Pubic:**	genital region
Deltoid:	shoulder		**Sacral:**	area between the hips
Digital:	fingers or toes		**Scapular:**	shoulder blade area
Dorsal:	back		**Sternal:**	region of the breastbone
Femoral:	thigh		**Sural:**	calf
Fibular:	lateral side of the leg		**Tarsal:**	ankle
Frontal:	forehead		**Tibial:**	medial side of the leg
Gluteal:	buttocks		**Thoracic:**	chest
Inguinal:	groin		**Umbilical:**	navel
Nasal:	nose		**Vertebral:**	spinal column

Reviewing Surface and Regional Anatomy

Label the following figure below with the terms listed in Table 1. Only label the regions that are unlabeled.



(Image credit: "Regions of the human body" by OpenStax is licensed under CC BY 4.0) / Labels modified by Harmony Folse

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