

Name: _____
A & P

Date: _____
Ms. Hartnett

Chapter 1, Part 1: The Human Body: An Orientation

I. WHAT IS ANATOMY?

∞ _____ = study of the _____ and shape of body parts and how they relate to each other

∞ Ana = _____

∞ Tomy = _____

∞ What does anatomy *literally* mean?

∞ _____

Three Main Types of Anatomy

1. Gross
2. Microscopic
3. Developmental

Gross Anatomy

1. _____ anatomy (macroscopic) = the study of _____ body structures visible to the _____, such as the:

- _____

- _____

- _____

A. **Regional Anatomy** = All of the structures in one particular _____ of the body, such as the _____ or leg.

B. _____ Anatomy = the gross anatomy of the body is studied _____ by system.

C. **Surface Anatomy** = the study of body structures as they relate to the overlying _____

Microscopic Anatomy

2. _____ Anatomy = Concerns structures _____ to be seen with the naked eye.

A. _____ = the study of _____

cyto = _____

B. _____ = the study of _____

histo = _____

Developmental Anatomy

3. _____ anatomy = traces structural _____ that occur in the body throughout the life span

A. Embryology = concerns environmental changes in the _____ prior to birth

Specialized Branches of Anatomy

☞ Used primarily for medical _____ and scientific research.

☞ Anatomic _____ = the study of structural changes caused by _____

☞ Radiographic Anatomy = studies internal structures through _____

☞ Molecular Biology = the structure of biological _____ is investigated.

Tools for Studying Anatomy

1. Anatomic _____

2. _____

3. Manipulation

4. _____ = feeling organs with your hands

5. Auscultation = listening to organ _____ with a stethoscope

II. WHAT IS PHYSIOLOGY?

- ☞ _____ = study of how the body and its part work or _____
- ☞ Physio = _____
- ☞ Ology = the _____
- ☞ What does physiology *literally* mean?
 - ☞ The _____

Types of Physiology

1. _____ Physiology = considers _____ function and urine production
2. _____ physiology = Explains the functioning of the _____ system
3. _____ Physiology = Studies the functioning of the _____ and _____ vessels

III. ANATOMY AND PHYSIOLOGY

- ☞ Anatomy and physiology are *always* _____
- ☞ Each part of your body has a job (_____)
- ☞ Structure _____ the function
- ☞ _____ **of structure and function:** what a structure can do depends on its specific form

Examples??

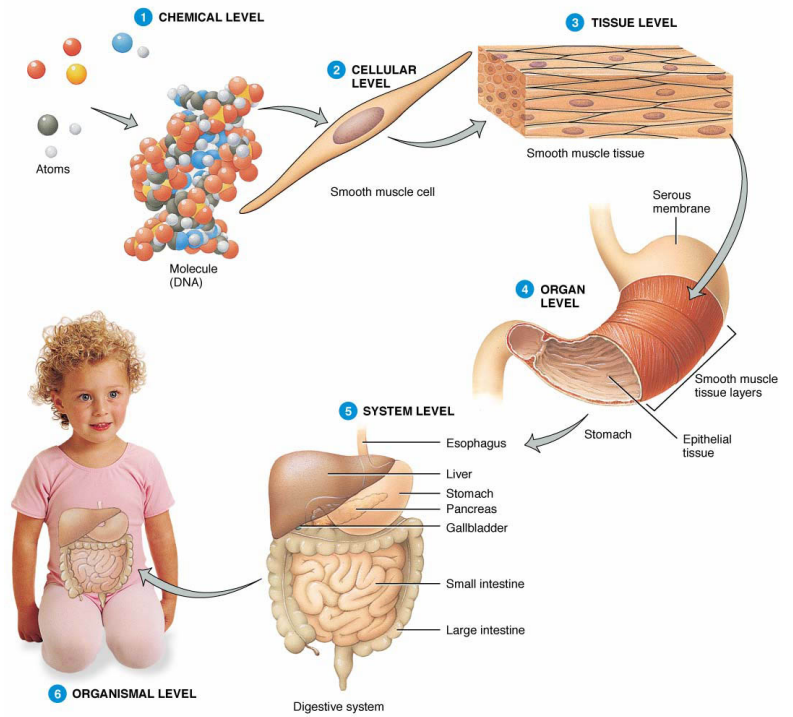
IV. LEVELS OF STRUCTURAL ORGANIZATION

1. Chemical
2. Cellular
3. _____
4. _____

5. Organ system
6. Organism

Organ Systems

1. Integumentary
2. Skeletal
3. _____
4. _____
5. Endocrine
6. _____
7. Lymphatic/Immunity
8. _____
9. Digestive
10. Urinary
11. Reproductive



V. MAINTAINING LIFE

☞ Necessary Life Functions

1. Maintaining _____
2. Movement
3. Responsiveness
4. _____
5. _____
6. Excretion
7. _____
8. Growth

☞ Survival Needs

1. Nutrients
2. _____
3. _____
4. Normal body _____
5. Atmospheric pressure

☞ Just having these needs are not enough

☞ You need to have them at the _____ amounts

VI. HOMEOSTASIS

- _____ = ability of the body to _____ relatively stable _____ conditions even though the outside world changes continuously

Negative Feedback

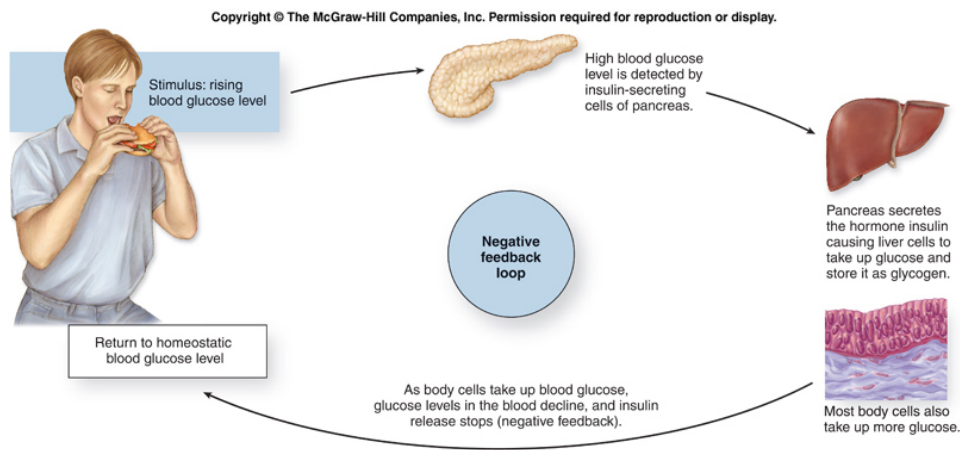
☞ _____ feedback mechanisms = causes the _____ to change in the _____ direction, returning to its _____ level.

☞ Examples:

1. Regulation of body _____
2. Blood _____
3. Heart Rate

☞ Others??

Examples of Homeostasis Controlled by Negative Feedback



Positive Feedback

∞ _____ feedback mechanisms:

∞ the response _____ the original stimulus so the original activity is

∞ _____ common than negative feedback

∞ Examples

1. Blood _____

2. Enhancement of labor _____ during childbirth

Example of Positive Feedback

