

Life Science 7

Chapter 22-1 Notes

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Body Organization

Objectives

- Identify the major tissues found in the body.
- Compare an organ with an organ system.
- Describe what **homeostasis** is.
- Describe a major function of each organ system

Homeostasis

- **homeostasis**: _____

 - generally maintained through the use of feedback loops
 - a stimulus causes a response, which “feeds back” and causes another stimulus
 - ex: body temperature, pain response, blood clotting

Four Tissue Types

- **tissue**: _____

- 4 types of tissue in the human body
 - _____: forms linings and coverings, also forms glands
 - _____: monitors the environment and sends electrical signals to and from the brain/spinal cord
 - _____: cells that cause movement
 - _____: joins, supports, protects, insulates, nourishes, cushions organs (includes bone, blood, fat, cartilage, tendons, ligaments, meninges, etc)

Organs vs Organ Systems

- **organs**: _____

- ex: heart, lungs, kidneys, brain, stomach, etc.

■ **organ systems:** _____

- Here are the 11 different organ systems...

#1: The Integumentary System

■ **Organs**

- Includes skin, glands, nails, hair

■ **Functions**

- _____ underlying tissues and organs
- regulates _____
- sense of _____ found here
- excretes some wastes (through sweating)

#2: Muscular System

■ **Major organs**

- skeletal muscles (eg: biceps brachii, triceps brachii), smooth muscles, cardiac muscle

■ **Functions**

- moves _____ around
- moves _____ around
- moves _____ through body
- _____ regulation (shivering, goosebumps)

#3: Skeletal System

■ **Major Organs:**

- _____

■ **Functions:**

- _____ body
- _____ organs
- stores/releases _____
- used for movement (along with muscular system)

#4: Cardiovascular System

■ **Major organs:**

- _____, arteries, veins, capillaries

■ **Functions**

- pumps _____ throughout body
- delivers _____ to appropriate destinations

#5: Nervous System

■ Major Organs:

- _____

■ Functions

- monitors external/internal environment
- control center of the body
- causes quick changes throughout the body in response to stimuli

#6: Lymphatic System / Immune System

■ Major Organs

- _____, spleen, thymus

■ Functions

- returns _____ to the bloodstream
- filters and removes _____ from blood

#7: Digestive System

■ Major organs

- mouth, esophagus, _____, small intestine, large intestine, liver, pancreas

■ Functions

- _____ food
- _____ through physical and chemical methods
- eliminates _____

#8: Endocrine System

■ Major organs

- pituitary gland, thyroid gland, parathyroid gland, pineal gland, ovaries, testes, adrenal glands, pancreas

■ Functions

- works with nervous system to _____
- ex: growth, puberty, maintains blood sugar, causes “fight or flight” response

#9: Respiratory system

■ Major organs

- _____

■ Functions

- absorbs _____ from air
- releases _____ into air
- involved with maintaining blood pH

#10: Urinary System

■ Major Organs:

- _____, ureters, _____, urethra

■ Functions

- filters _____ from blood
- excretes wastes
- helps maintain _____

#11a: Female Reproductive System

■ Major Organs:

- _____, oviducts, uterus, vagina

■ Functions

- produces _____
- protects, nourishes _____ during development
- promotes female development during puberty

11b: Male Reproductive System

■ Major organs

- _____, prostate gland, Cowper's gland, vas deferens, penis

■ Function

- creates and delivers _____
- promotes male characteristics