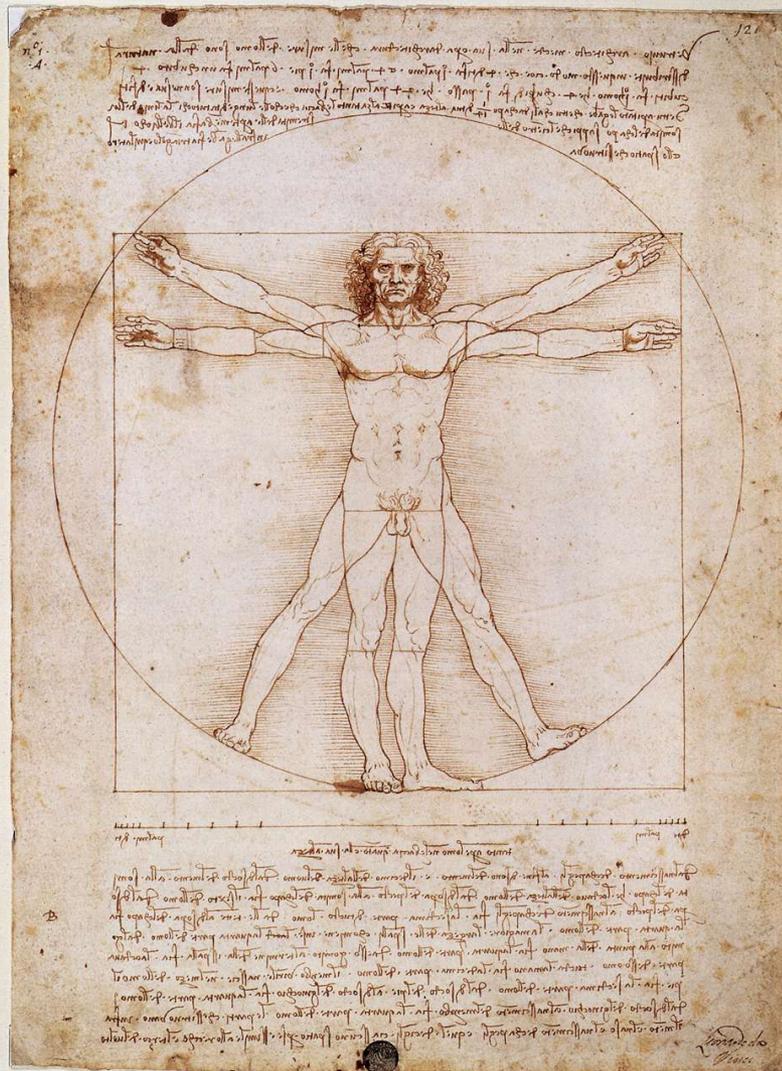


Chapter 1

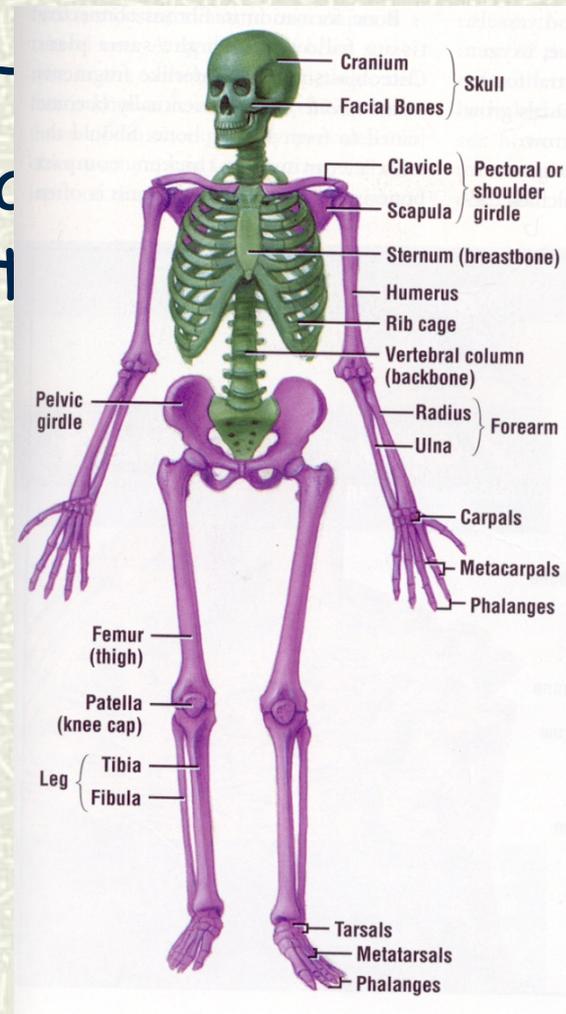


Introduction to Anatomy & Physiology

Mrs. Black

Ch 1.6 Organization of the Body

- # The human body is divided into two main sections:
 - Axial - head, neck, and trunk
 - Appendicular - upper and lower limbs



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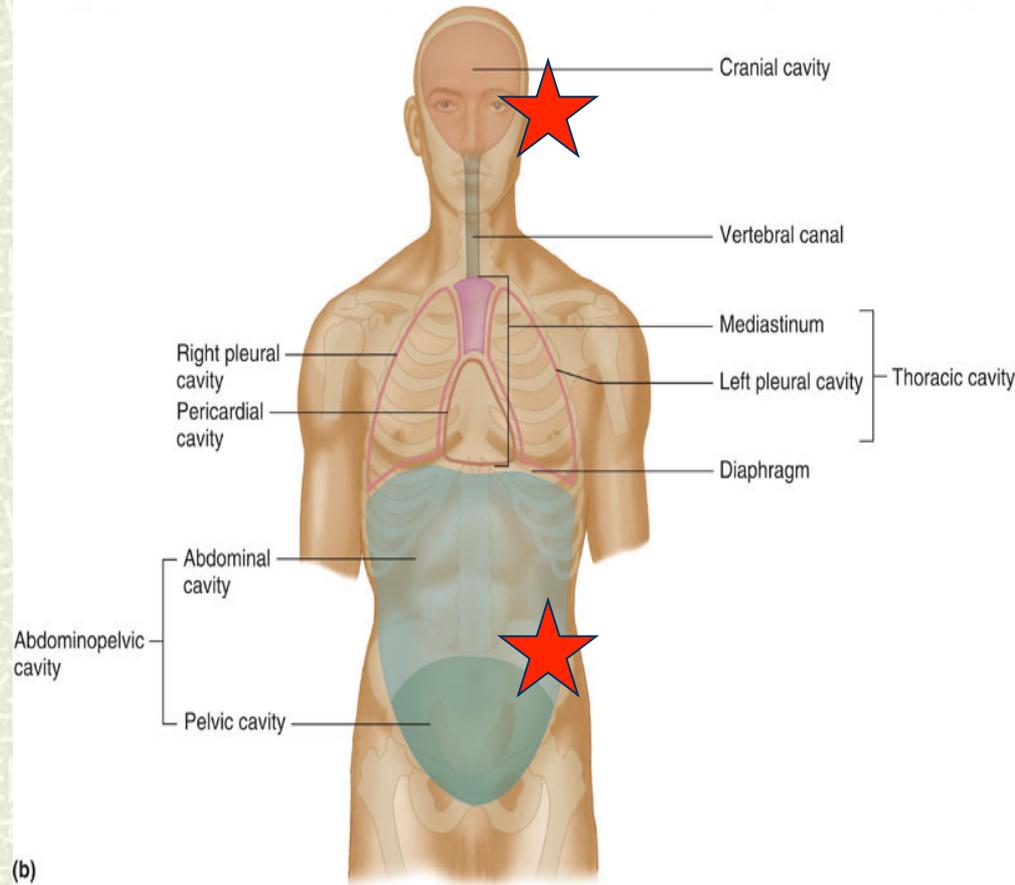
Body Cavities

- **Axial Portion**

- ▶ Contains the cranial cavity, vertebral canal, thoracic cavity, and abdominopelvic cavity
- ▶ Thoracic and abdominopelvic cavities separated by the **diaphragm**
- ▶ The organs within the cavity are called **viscera**

Body
Cavities

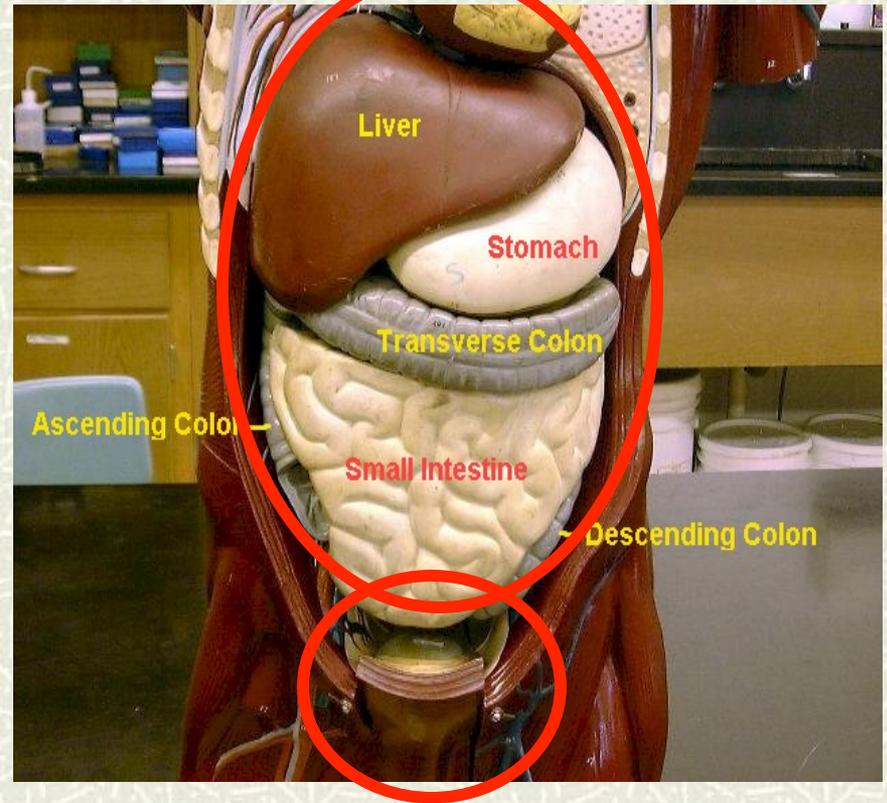
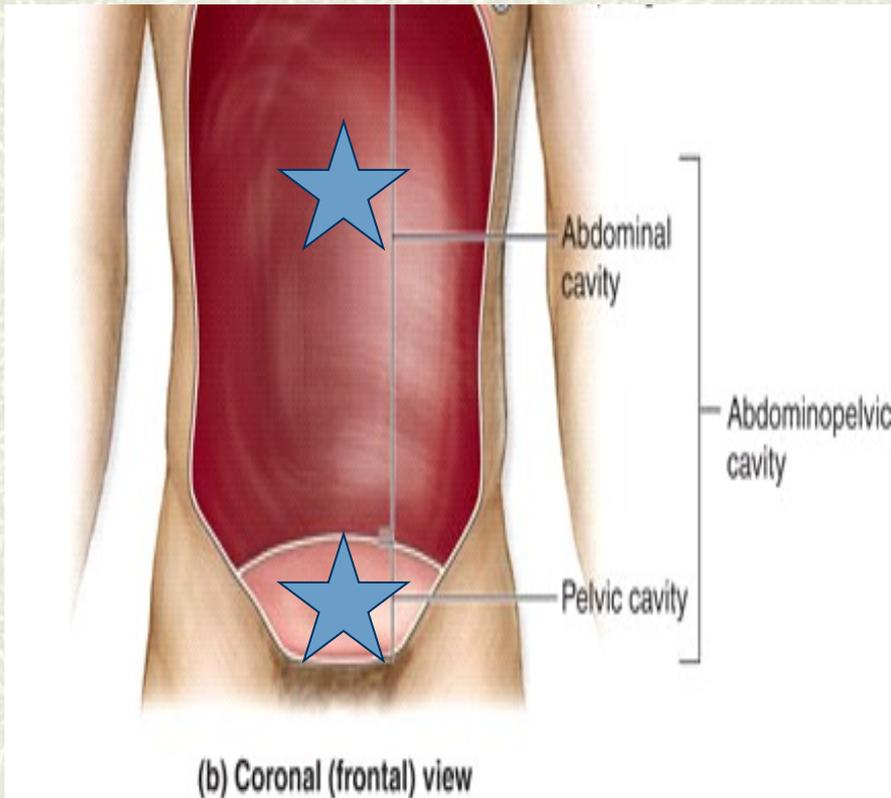
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Abdominopelvic cavity:

★ **Abdominal:** stomach, intestines, liver, spleen and kidneys.

★ **Pelvic:** bladder, rectum, and reproductive organs

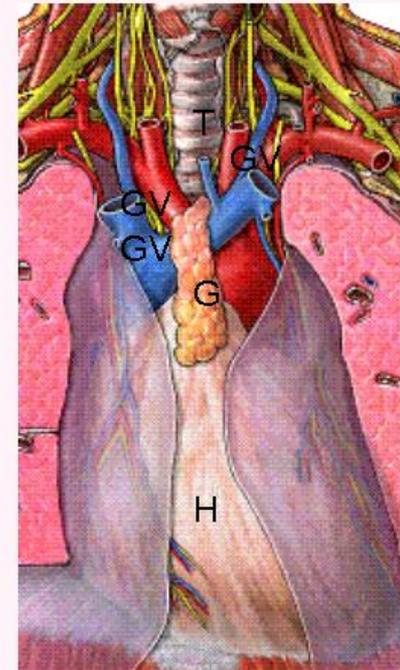


The Mediastinum

Separates the thoracic cavity into right and left compartments

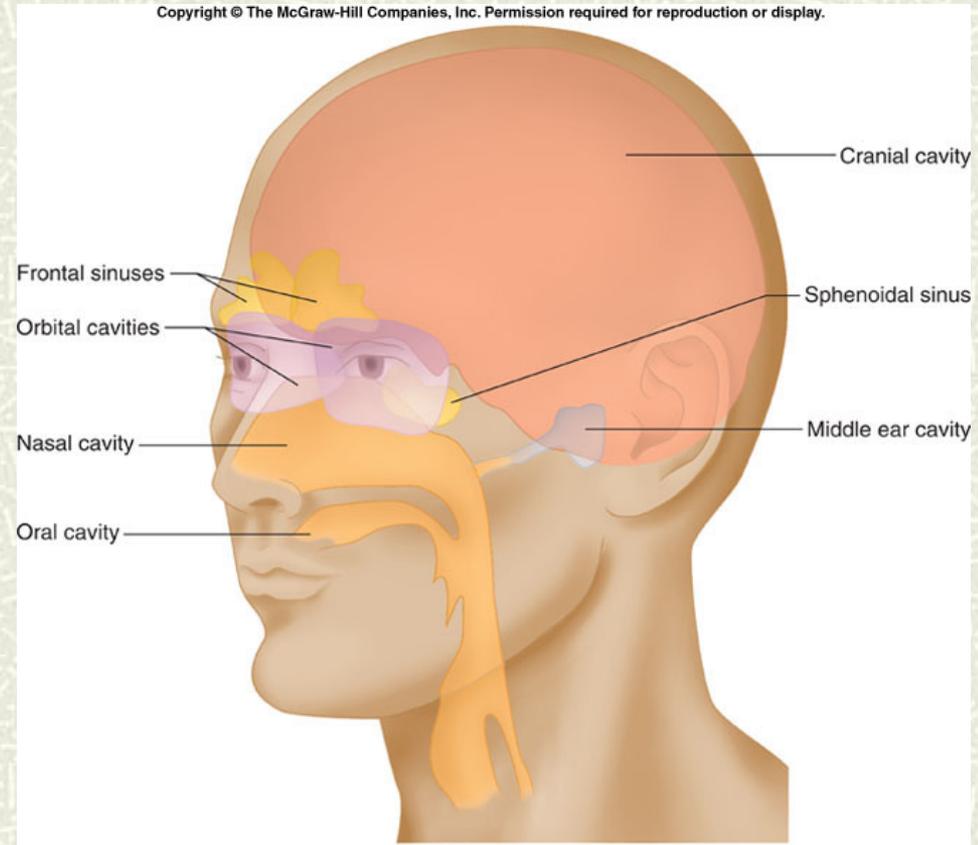
structures found in the mediastinum

- the heart [H]
- the trachea [T]
- the great vessels [GV]
- thymus gland [G]
- various nerves
- various lymphatic nodes and vessels



Cranial Cavity

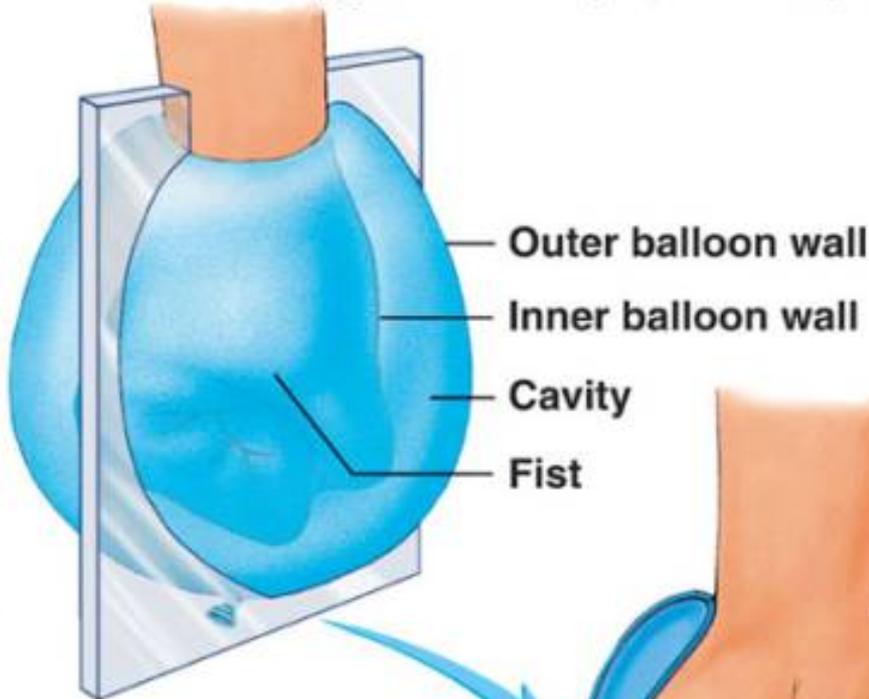
a. Cavities include the oral, nasal, orbital, and middle ear



Membranes

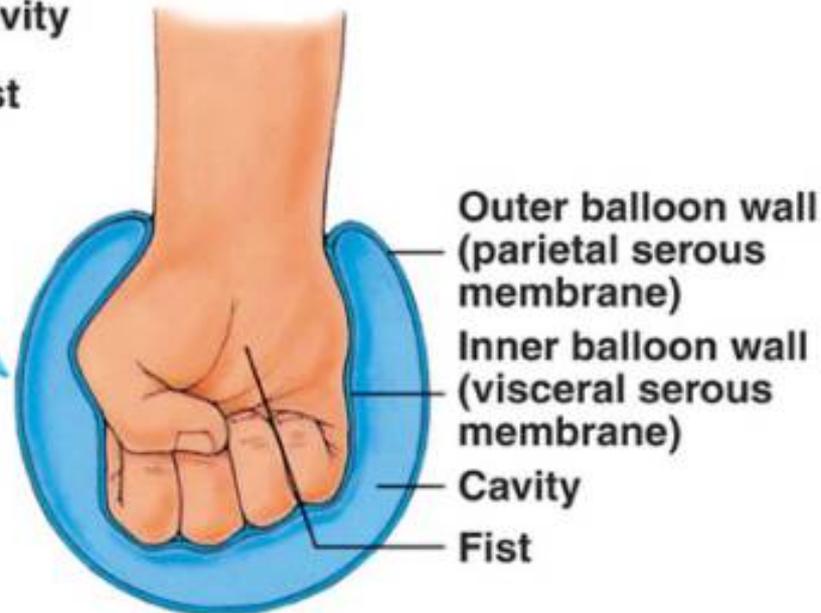
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a.



b.

c.



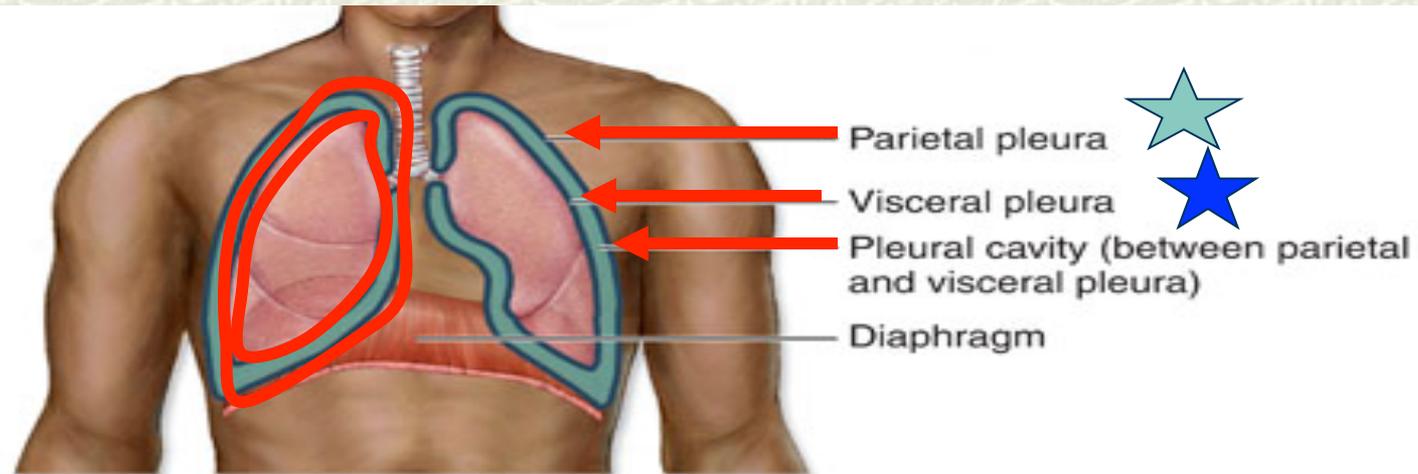
**Serous
Membranes**

the
(wall)
organ

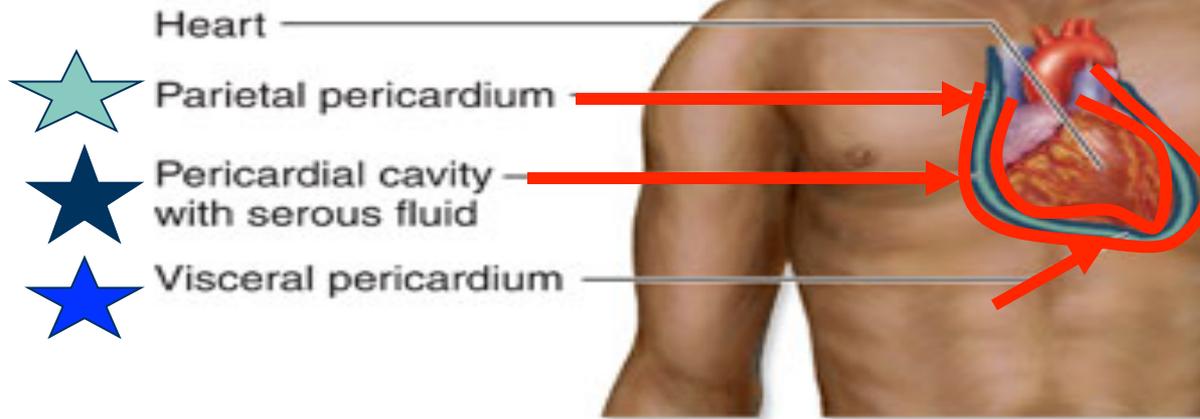
he
has
as

Pleural Membranes (pleur=rib)

- parietal pleura - membrane that lines the thoracic cavity
- visceral pleura - membrane that covers lungs
- Pleural cavity (potential space between)



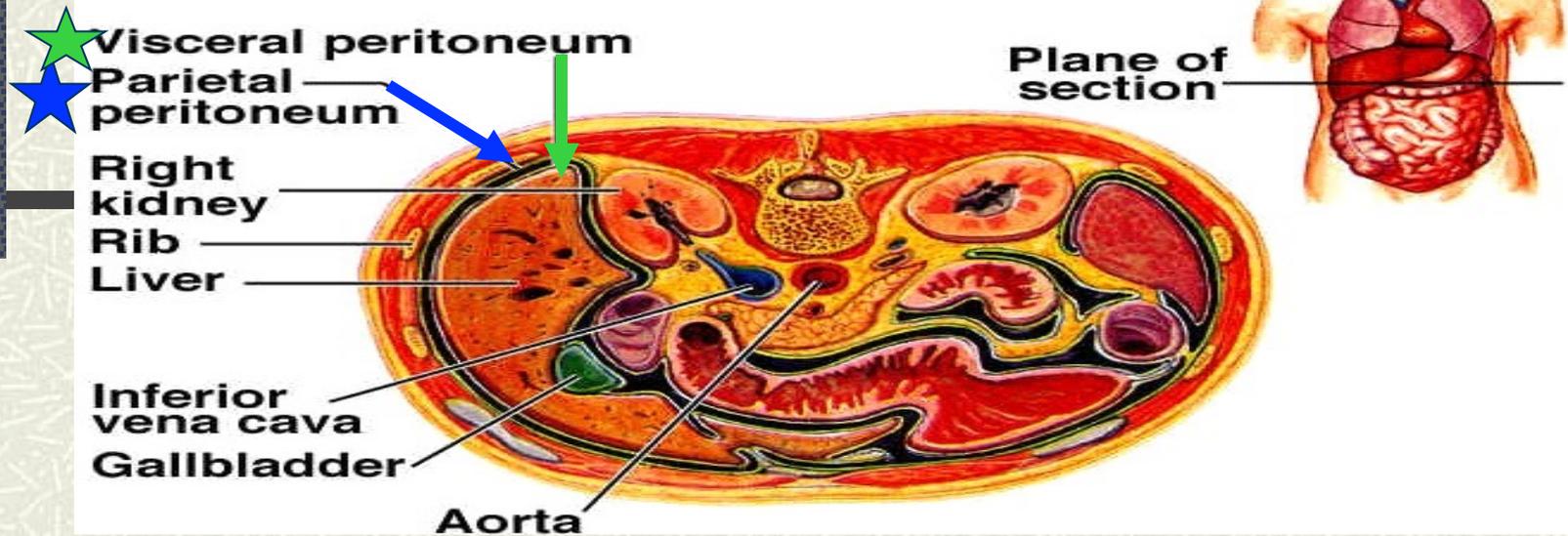
(c) Pleura



(b) Pericardium

Pericardial Membranes (peri=around, cardi=heart)

- parietal pericardium - membrane that forms sac around the heart
- visceral pericardium - membrane on heart's surface
- Pericardial cavity (potential space between)



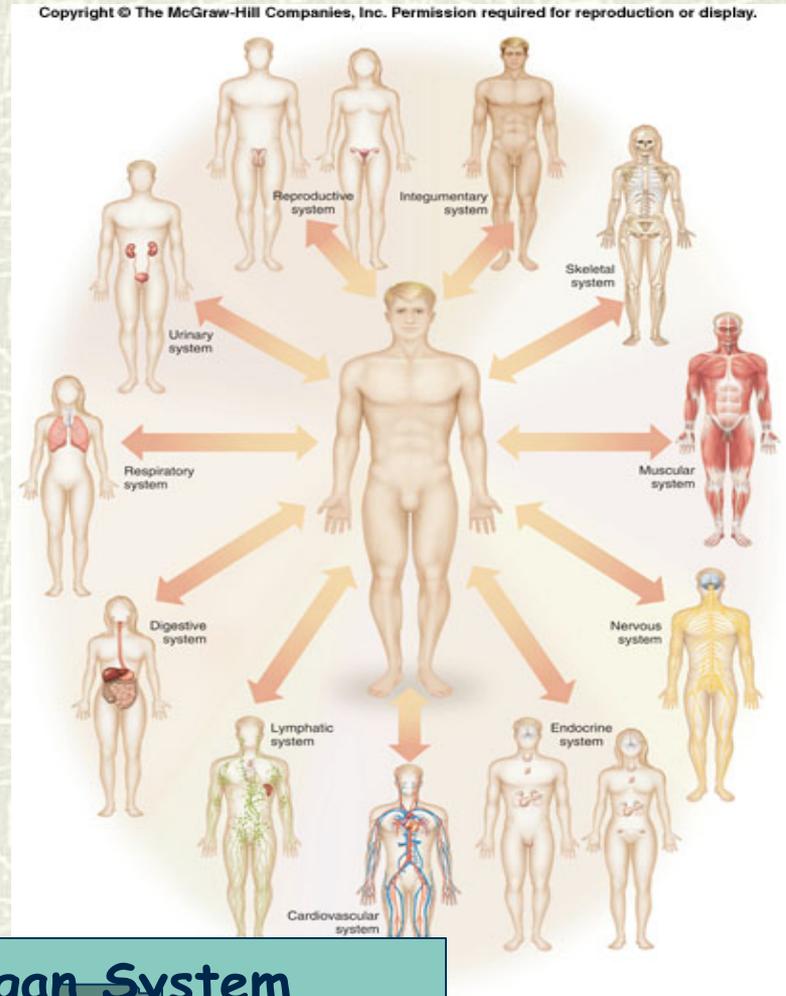
Peritoneal Membranes

- parietal peritoneum - lines the walls of the abdominopelvic cavity
- Visceral peritoneum - membranes that covers each organ {**Viscera** - organs within the cavity}
- Peritoneal cavity (potential space between)

Body Cavity Membranes

Organ Systems divided into 6 categories

- # Body Covering
- # Support & Movement
- # Integration & Coordination
- # Transport
- # Absorption & Excretion
- # Reproduction

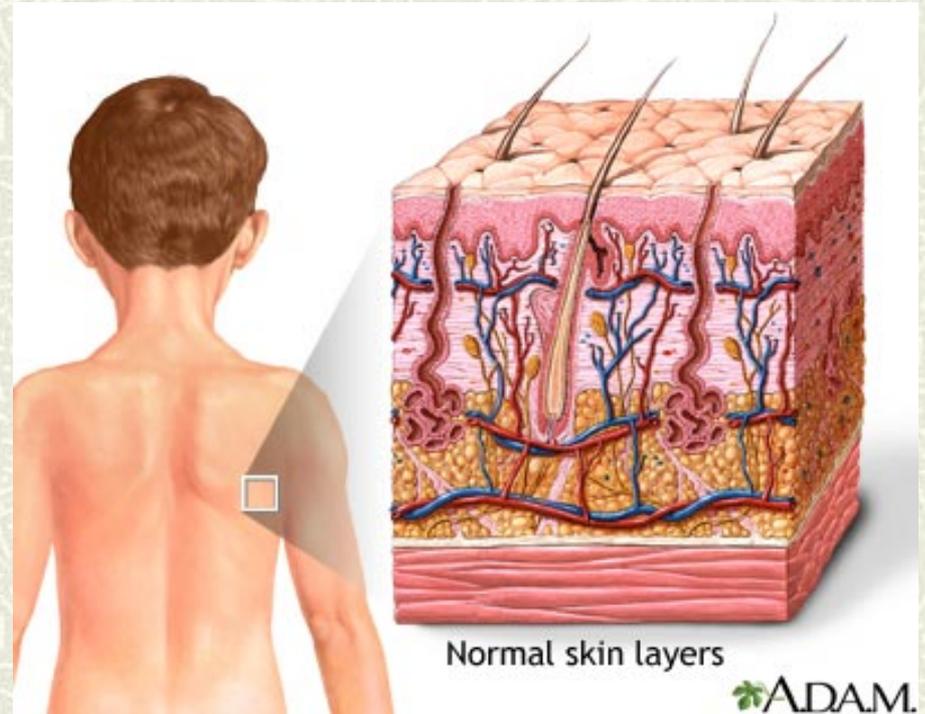


Organ System
Animation

Body Coverings

Integumentary

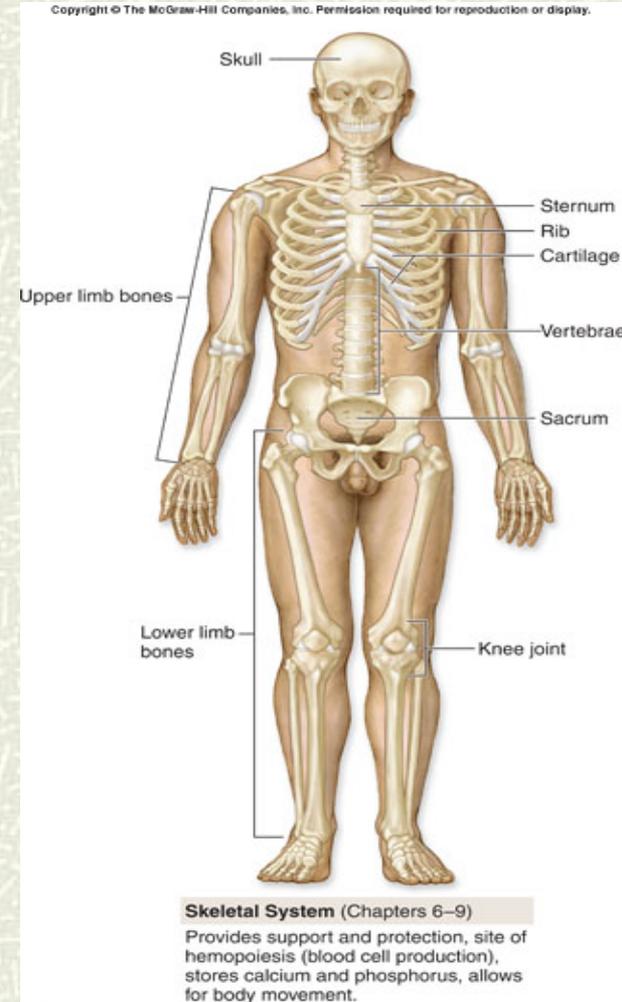
- Function: regulate body temperature, protection
- Organs: skin, hair, nails, glands



Support & Movement

Skeletal

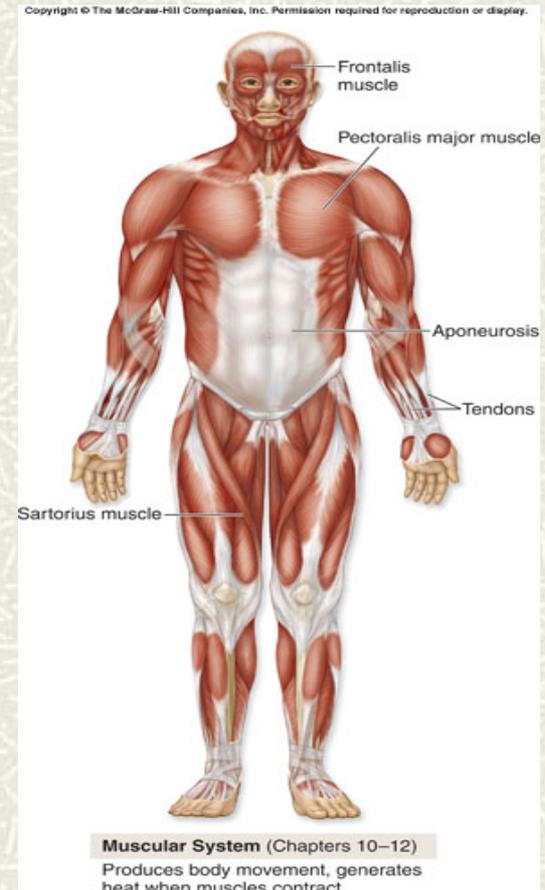
- Function: framework
- Organs: Bones



Support & Movement

Muscular

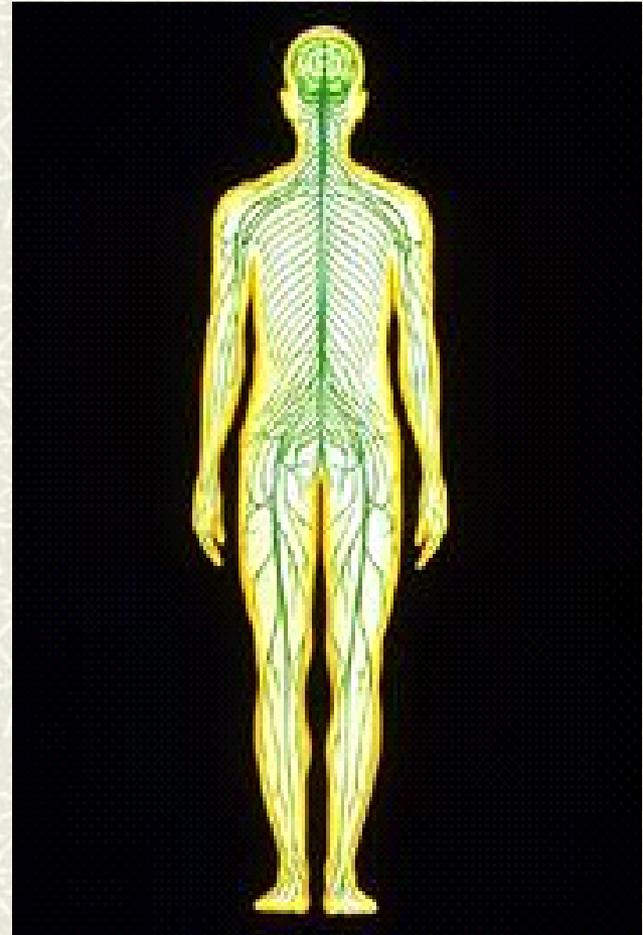
- Function: movement, posture, body heat
- Organs: muscles



Integration & Coordination

Nervous

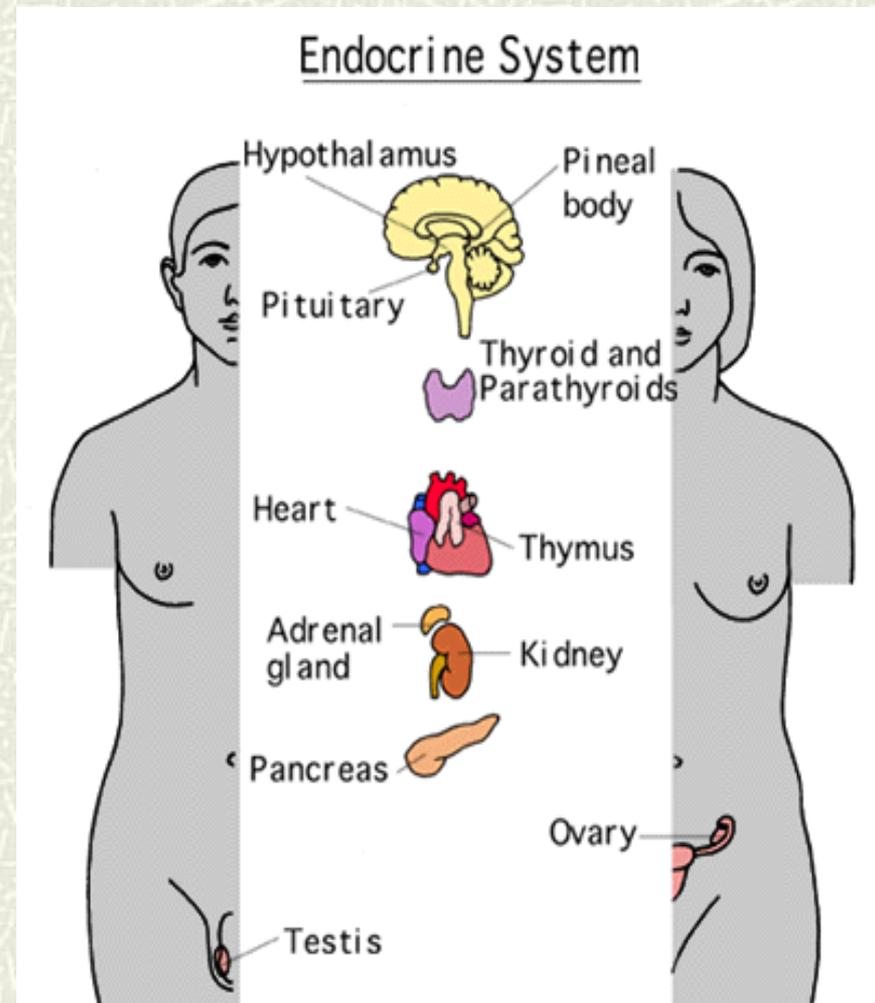
- Function: sensory, communication
- Organs: brain, spinal cord, nerves, sense organs (eyes, ears, taste...)



Integration & Coordination

Endocrine

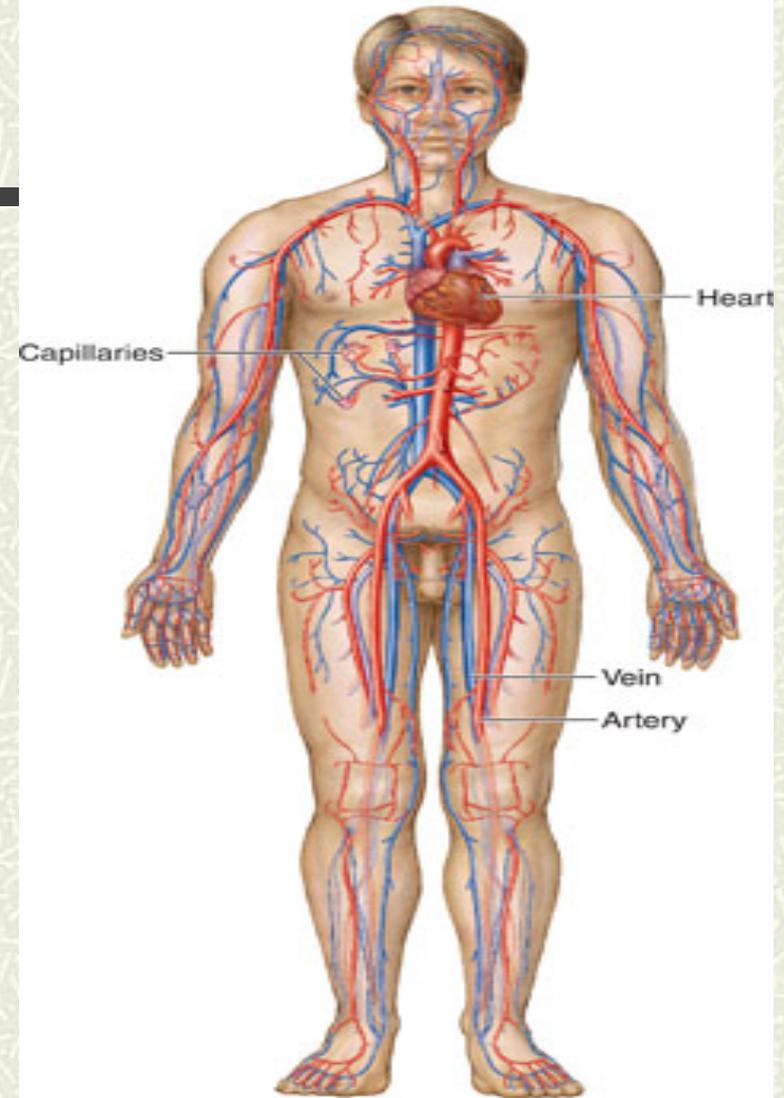
- Function: metabolism
- Organs: glands (pituitary, thyroid, reproductive...)



Transport

Cardiovascular

- Function: movement of substances
- Organs: heart, vessels, blood



Cardiovascular System (Chapters 21–23)

Consists of a pump (the heart) that moves blood through blood vessels in order to distribute hormones, nutrients, and gases, and pick up waste products.

Transport

Lymphatic

- Function: movement of fats and fluids, immunity
- Organs: lymph nodes, thymus, spleen

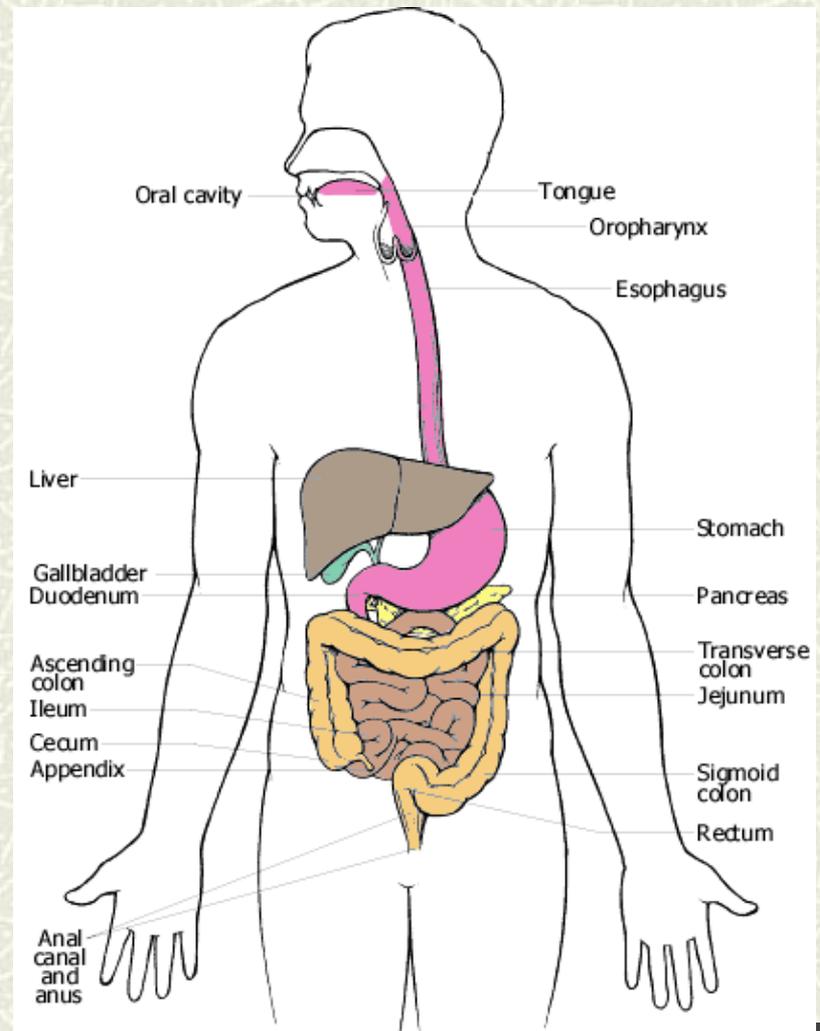
Lymphatic system



Absorption & Excretion

Digestive

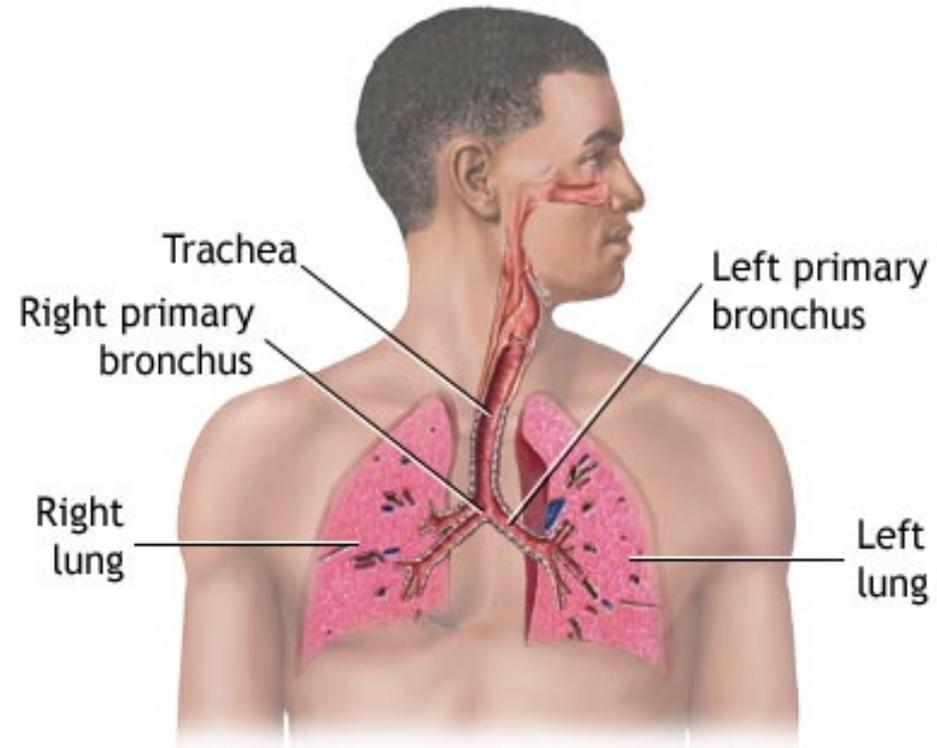
- Function: breakdown and absorb nutrients
- Organs: mouth... stomach... intestines



Absorption & Excretion

Respiratory

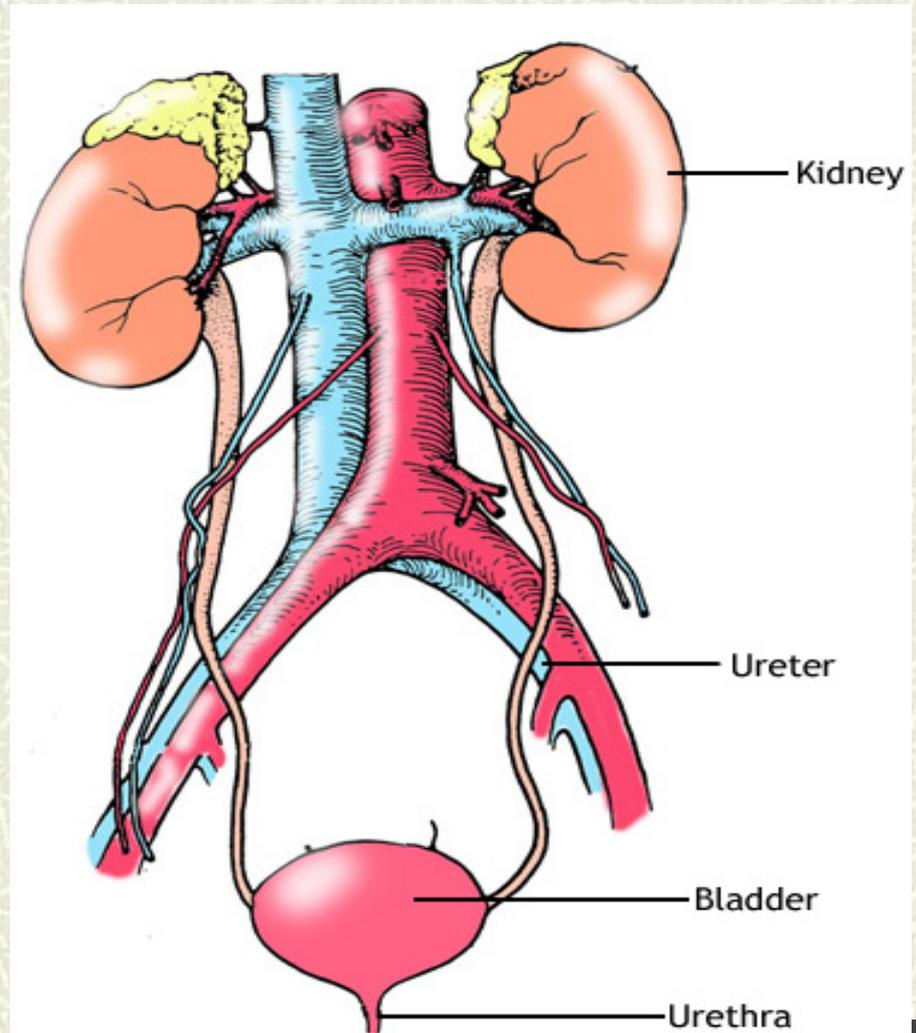
- Function: Oxygen in, Carbon dioxide out
- Organs: nose... trachea...lungs



Absorption & Excretion

Urinary

- Function: remove waste
- Organs: kidneys, bladder, urethra



Reproduction

- Function: to produce offspring
- Organs:
 - Male: testes...penis
 - Female: ovaries...uterus

11 Organ Systems

