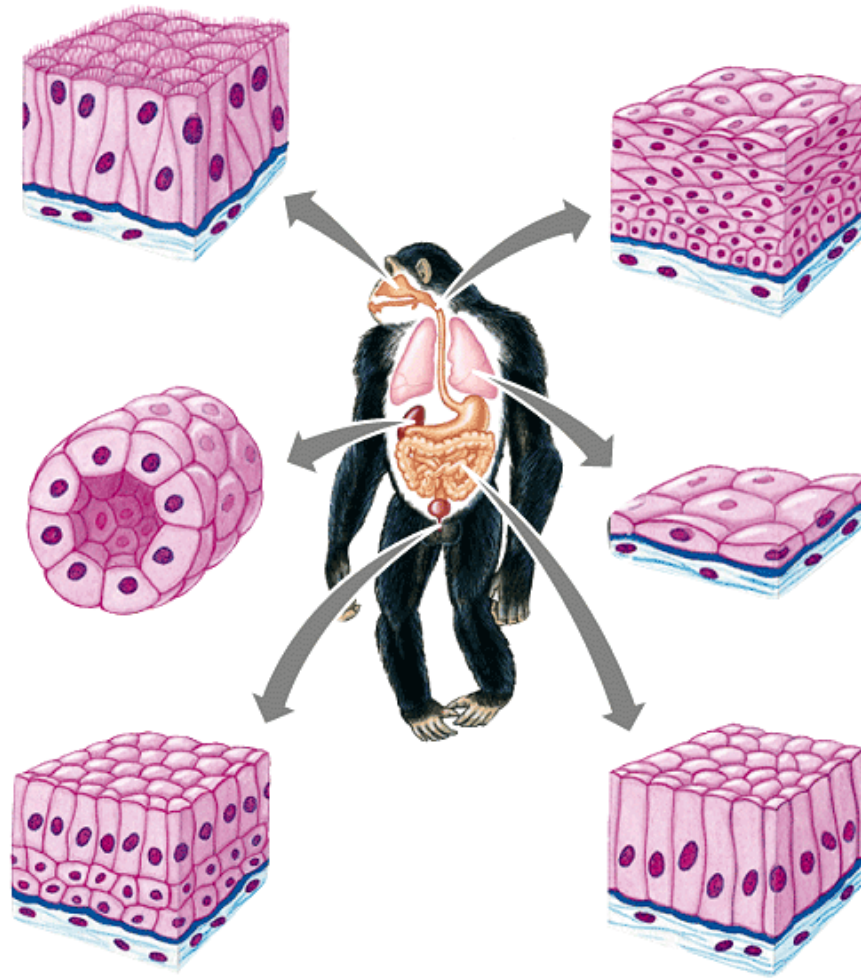


# Pre AP Biology

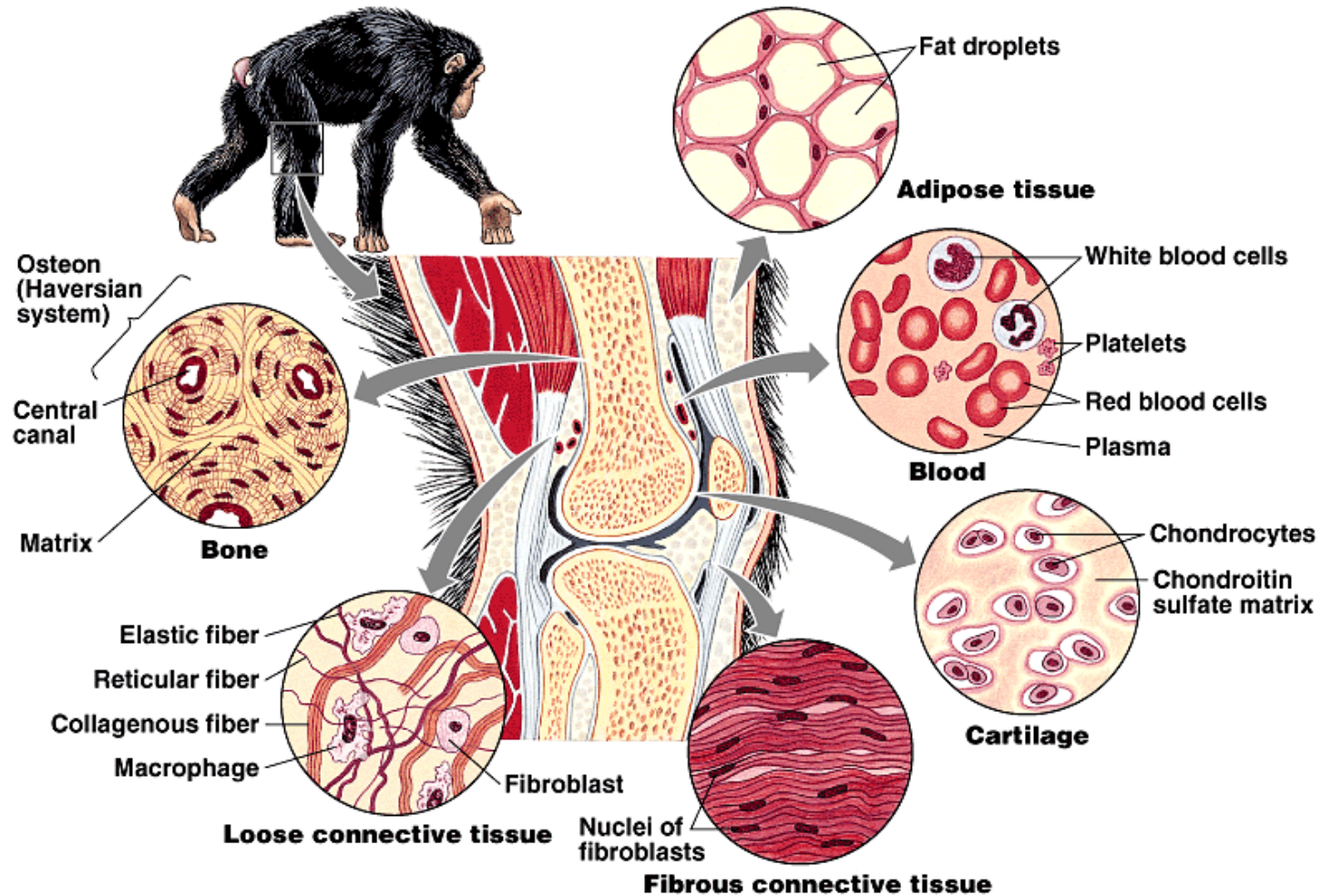
Basic Anatomy and Physiology (8.8)

Part 1

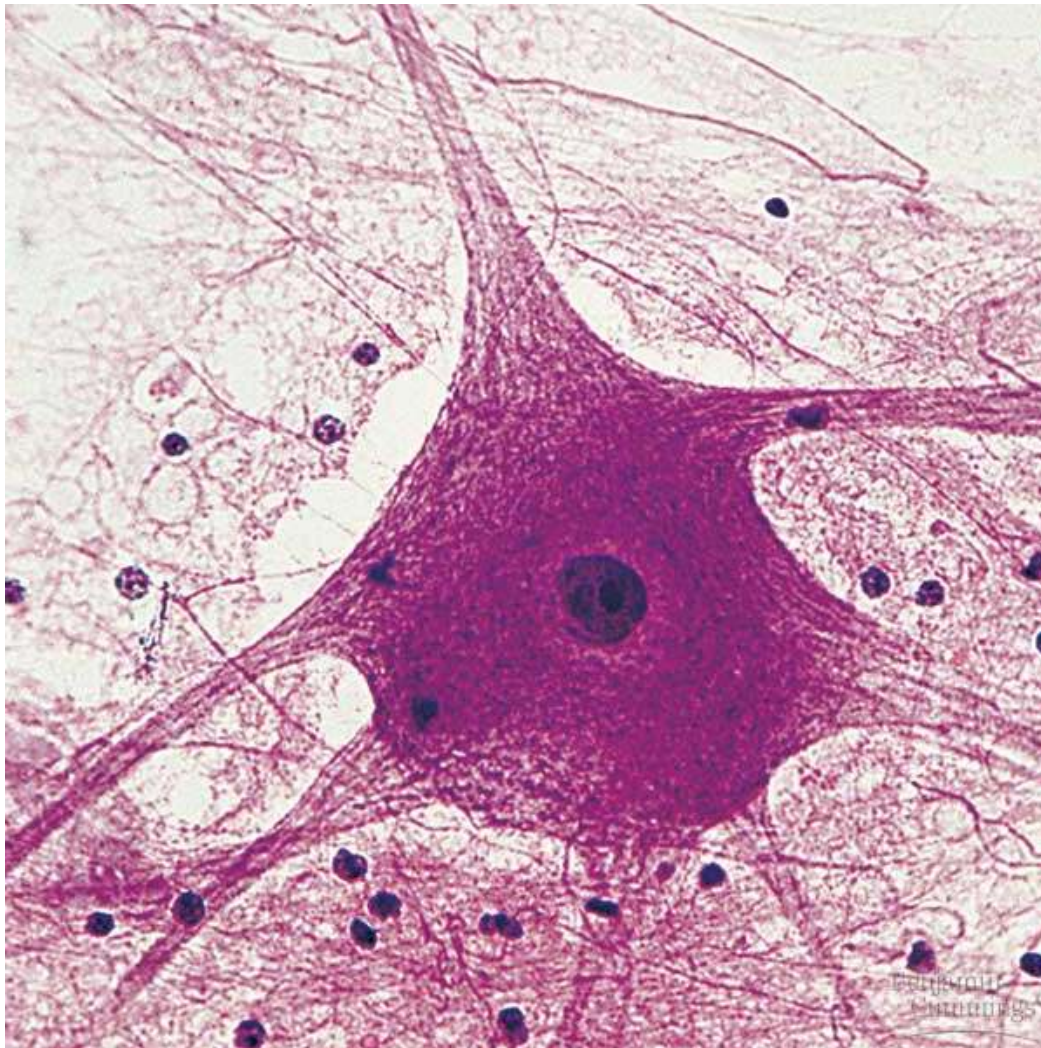
# Epithelial tissue



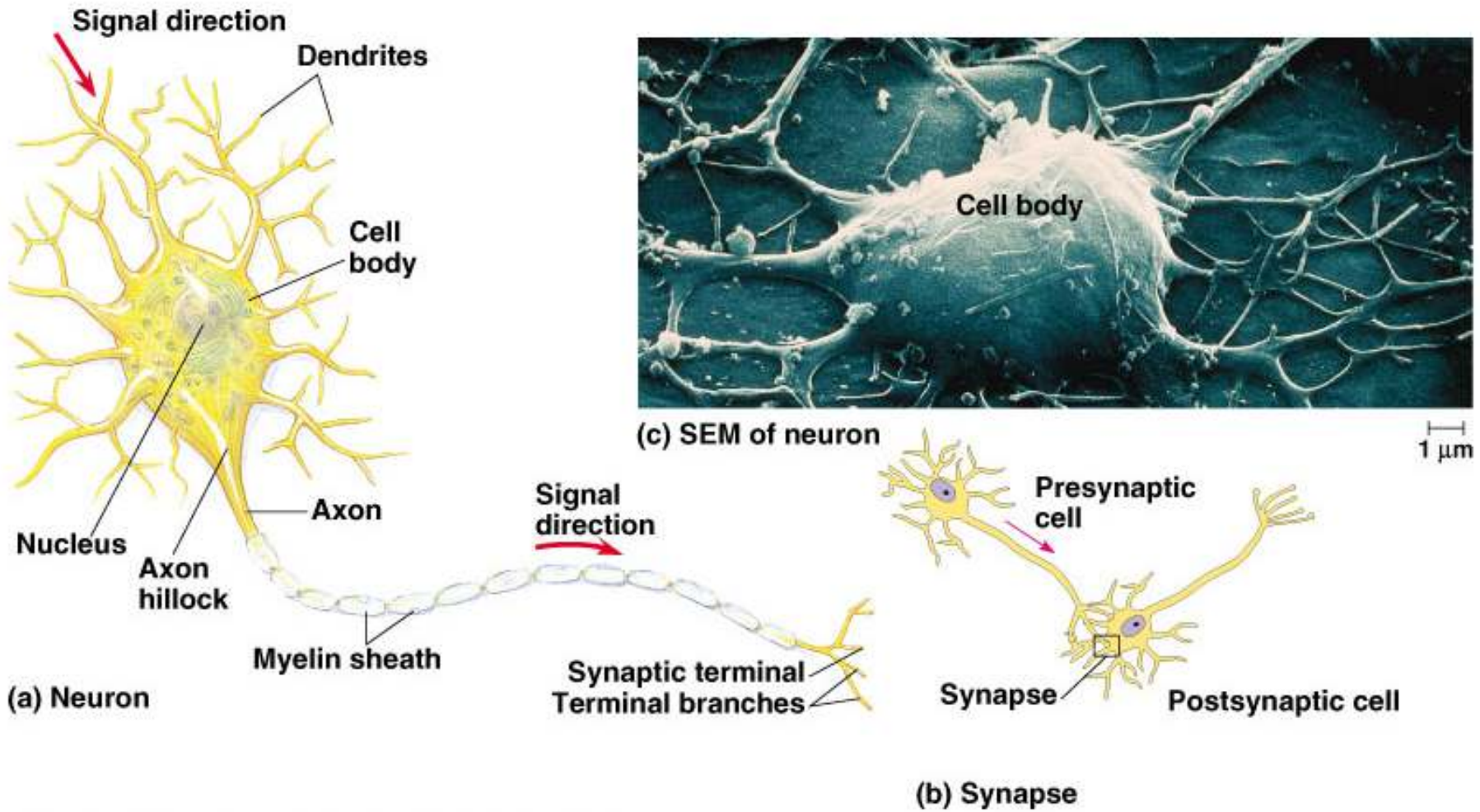
# Connective Tissues



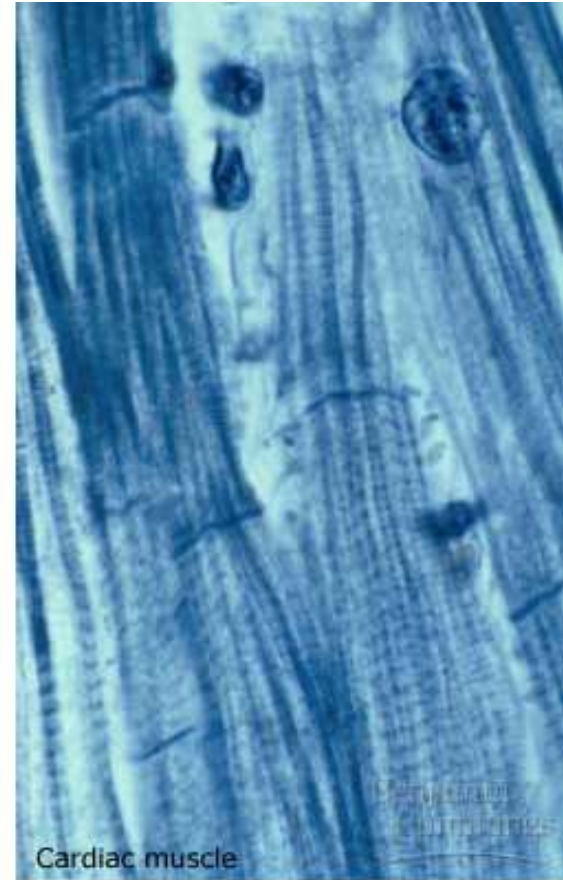
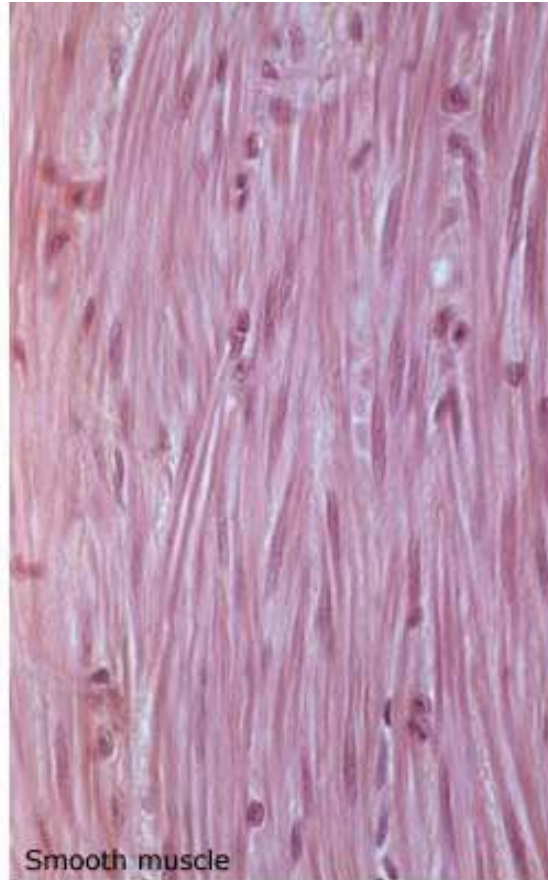
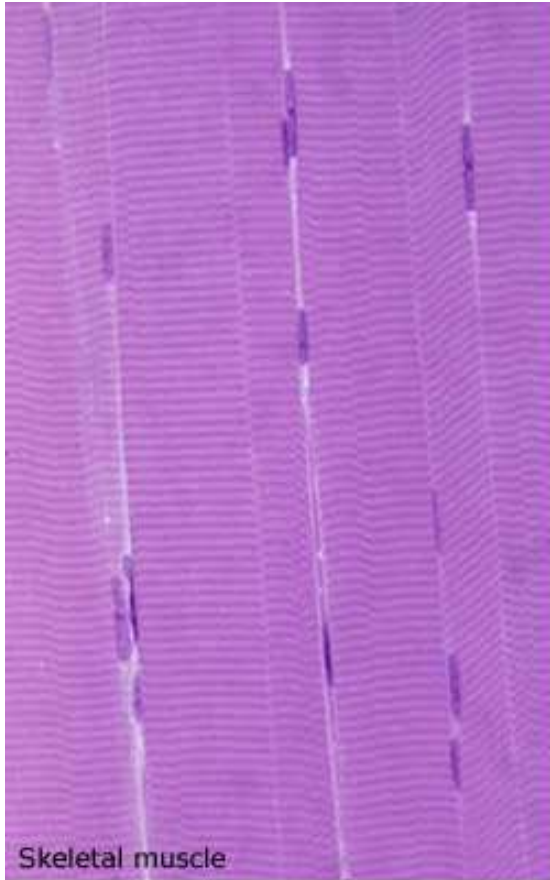
# Nervous Tissue



# Nervous Tissue

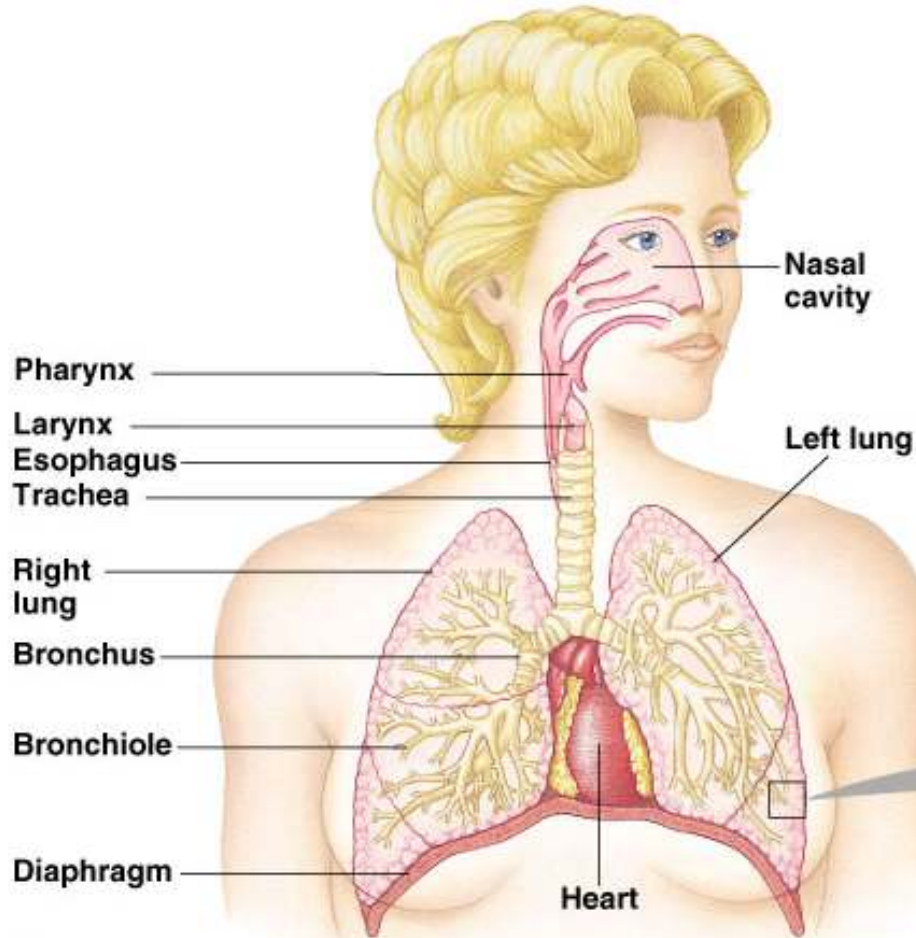


# Muscle Tissues

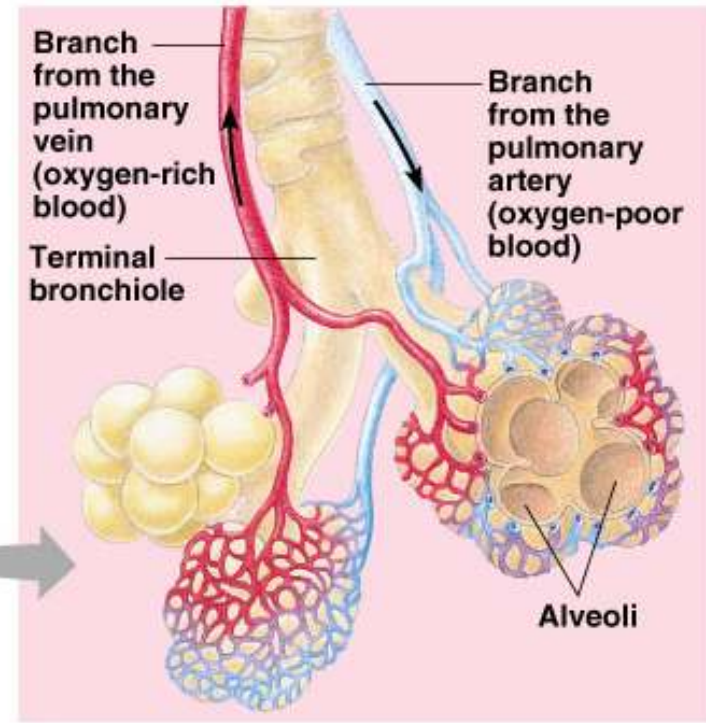


# Organs and Organ Systems

## Thoracic Cavity



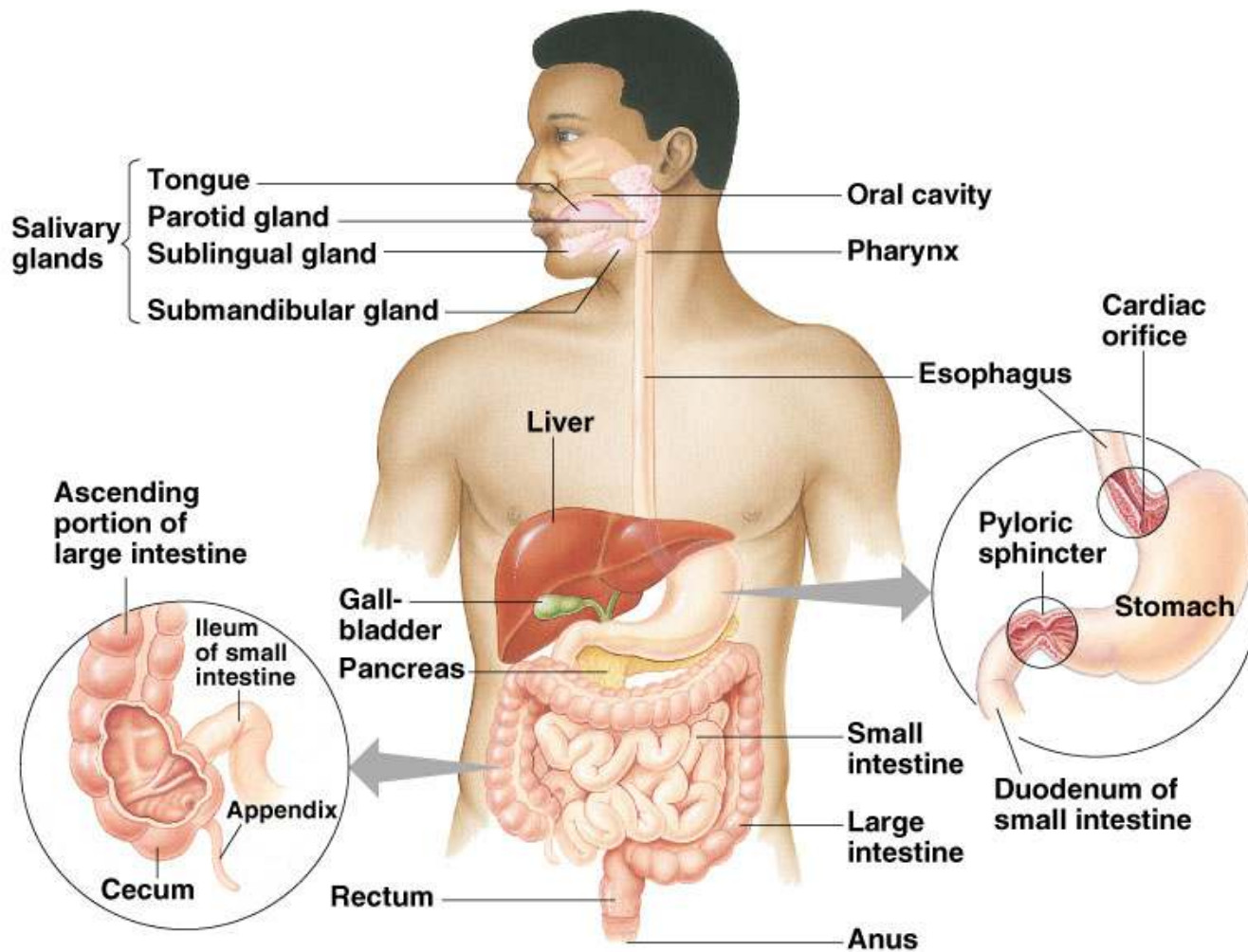
(a)



(b)

# Organs and Organ Systems

## Abdominal Cavity





# Organ Systems in the Human Body

**Table 40.1 Organ Systems: Their Main Components and Functions in Mammals**

Organ System	Main Components	Main Functions
Digestive	Mouth, pharynx, esophagus, stomach, intestines, liver, pancreas, anus	Food processing (ingestion, digestion, absorption, elimination)
Circulatory	Heart, blood vessels, blood	Internal distribution of materials
Respiratory	Lungs, trachea, other breathing tubes	Gas exchange (uptake of oxygen; disposal of carbon dioxide)
Immune and Lymphatic	Bone marrow, lymph nodes, thymus, spleen, lymph vessels, white blood cells	Body defense (fighting infections and cancer)
Excretory	Kidneys, ureters, urinary bladder, urethra	Disposal of metabolic wastes; regulation of osmotic balance of blood
Endocrine	Pituitary, thyroid, pancreas, other hormone-secreting glands	Coordination of body activities (e.g., digestion, metabolism)
Reproductive	Ovaries, testes, and associated organs	Reproduction
Nervous	Brain, spinal cord, nerves, sensory organs	Coordination of body activities; detection of stimuli and formulation of responses to them
Integumentary	Skin and its derivatives (e.g., hair, claws, skin glands)	Protection against mechanical injury, infection, drying out
Skeletal	Skeleton (bones, tendons, ligaments, cartilage)	Body support, protection of internal organs
Muscular	Skeletal muscles	Movement, locomotion

# Organism

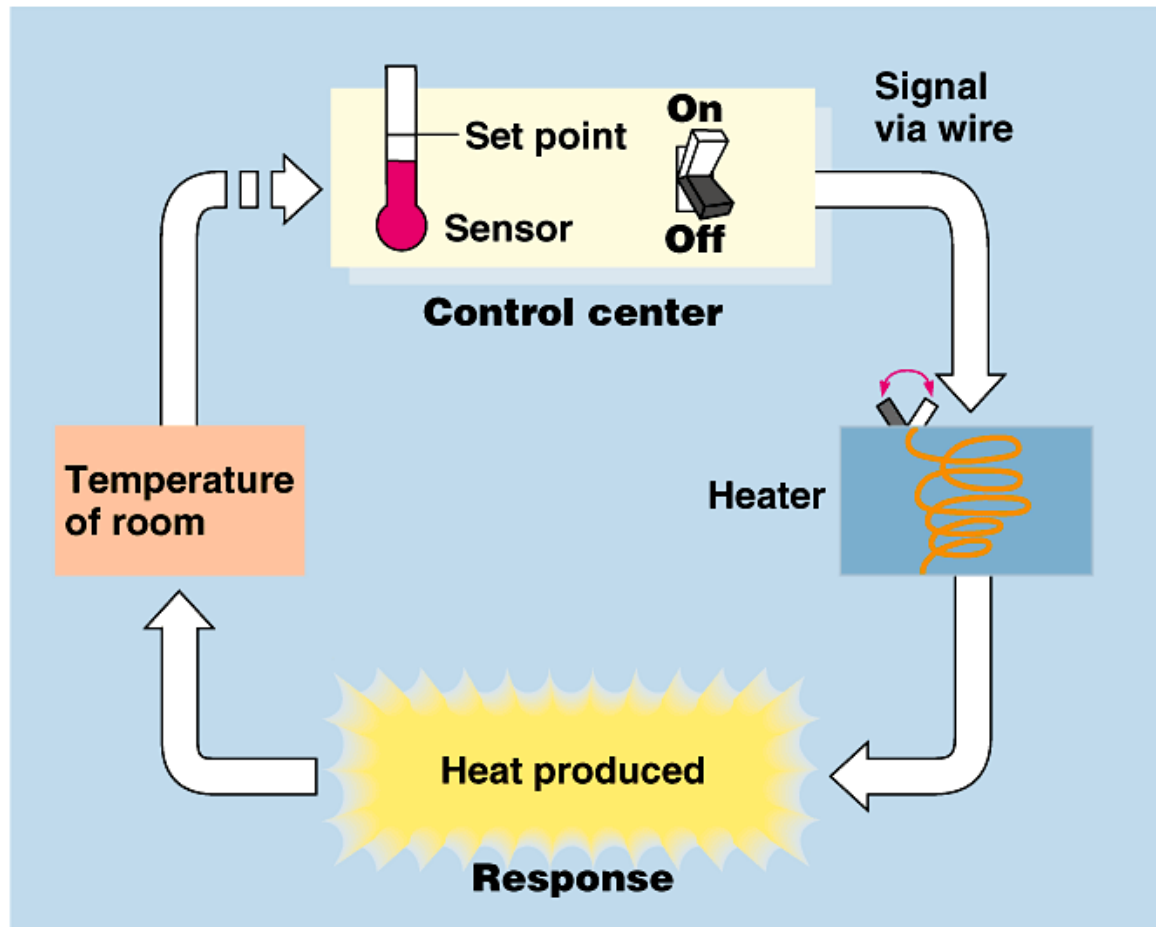


# Pre AP Biology

Basic Anatomy and Physiology (8.8)

Part 2

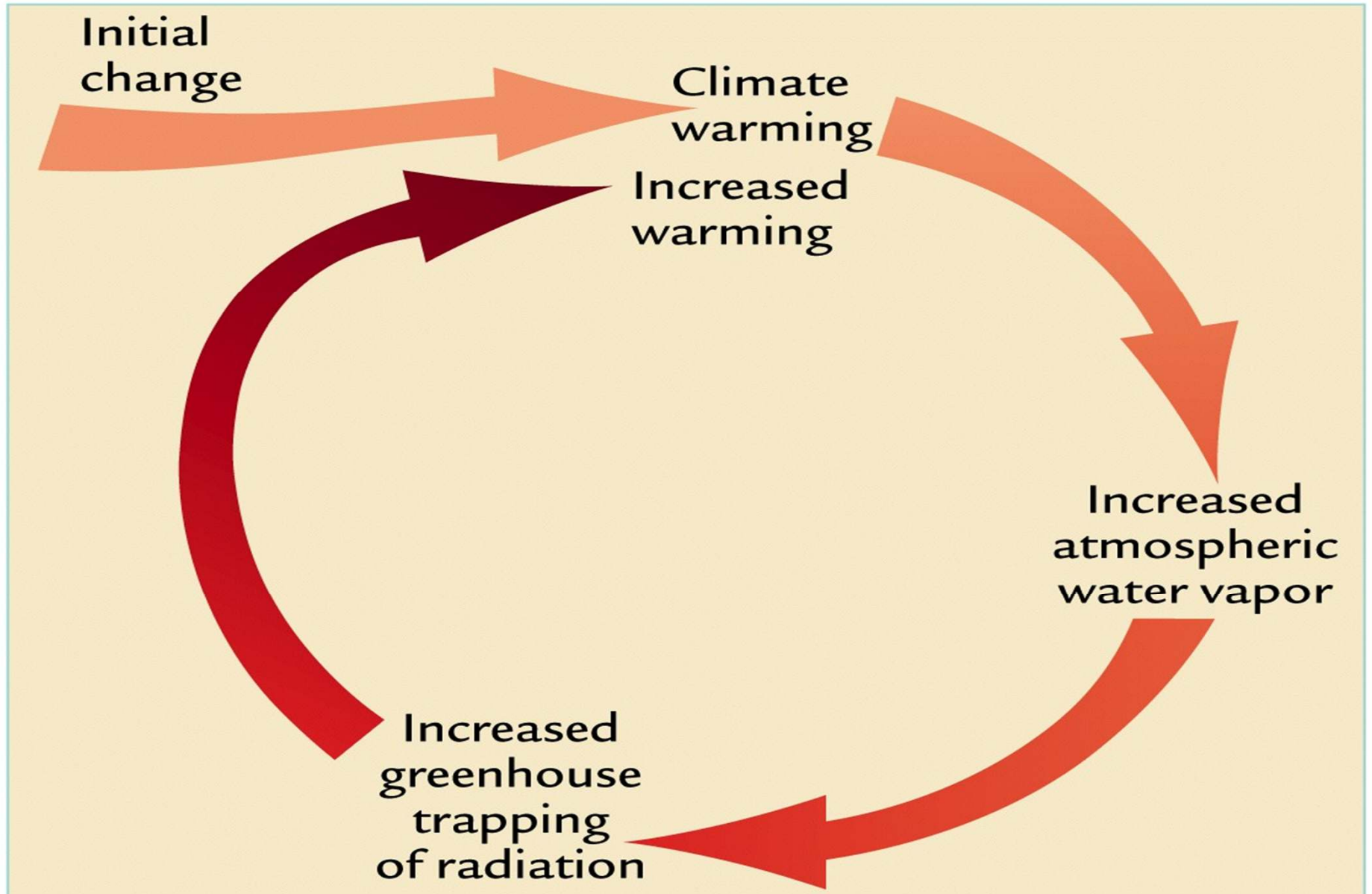
# Negative Feedback Loop



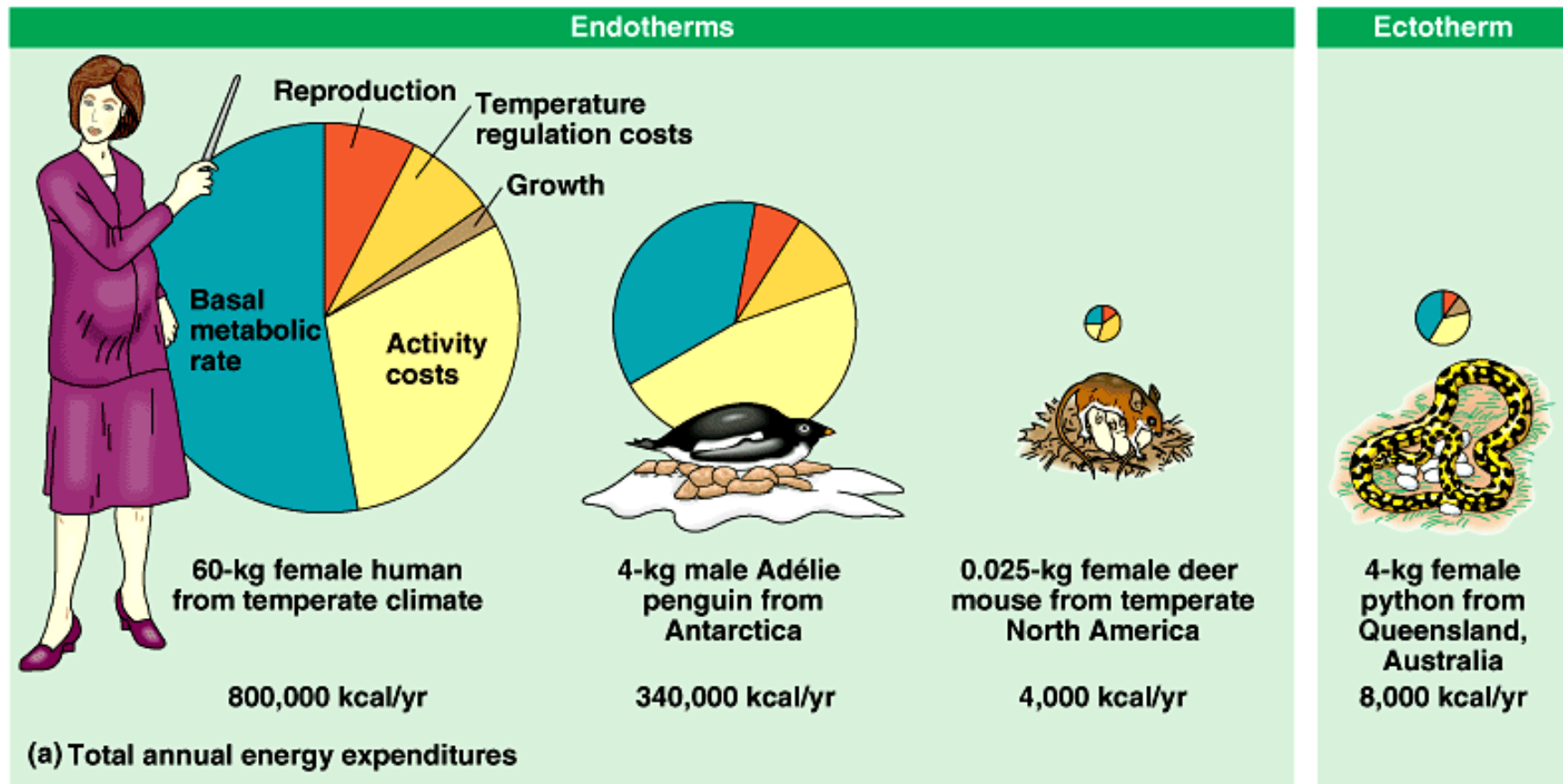
**(a) Control of room temperature**

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# Positive Feedback Loop



# Metabolism vs. Size vs. Energy



# Insulation - Hair



# Insulation - feathers





# Insulation - Fat

