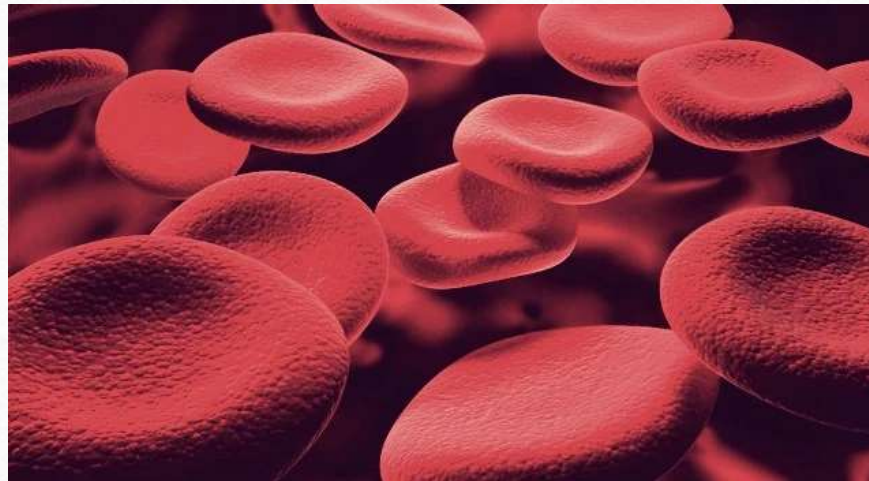


Levels of Organization and Body Systems

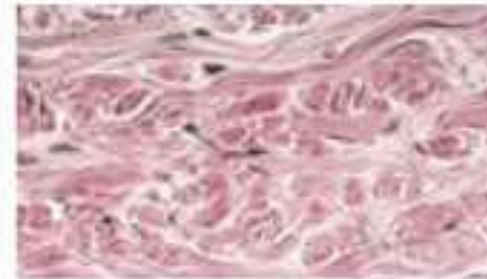
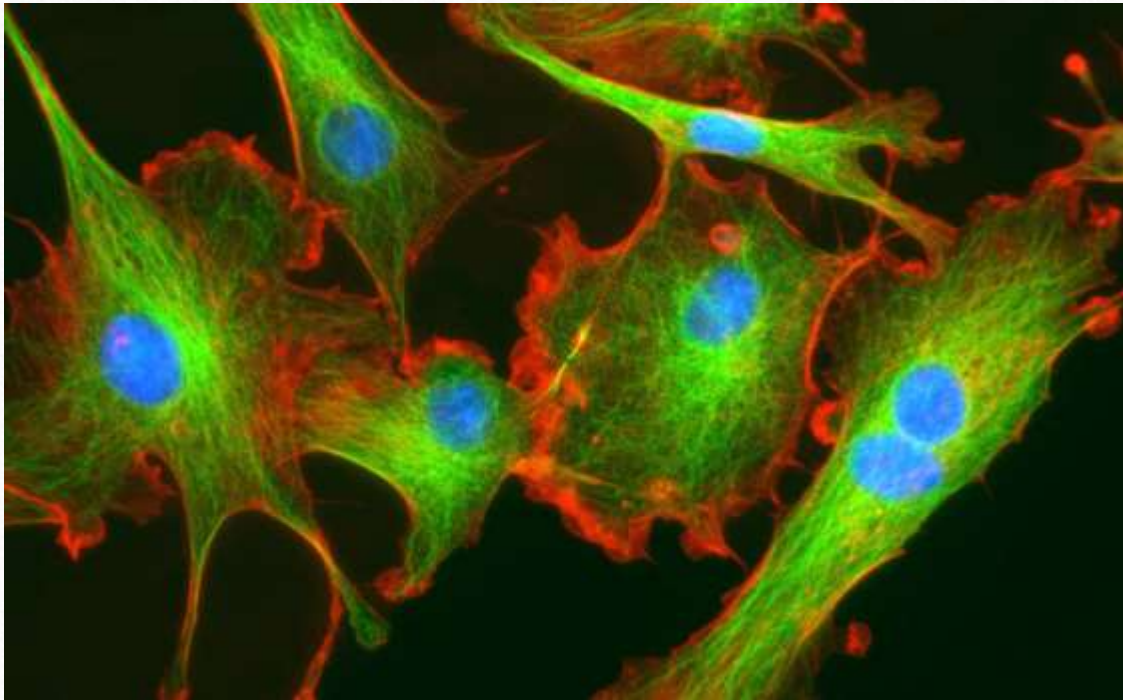
Levels of Organization: the order of organization in an organism from smallest to largest

- Cells
- Tissues
- Organs
- Organ Systems
- Organism

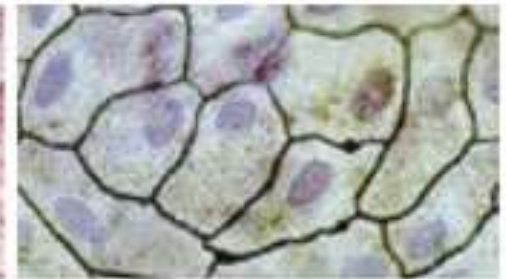
- Cells: the smallest unit of life.



Tissues: a group of cells working together to perform a specific function



CONNECTIVE TISSUE



EPITHELIAL TISSUE



MUSCLE TISSUE

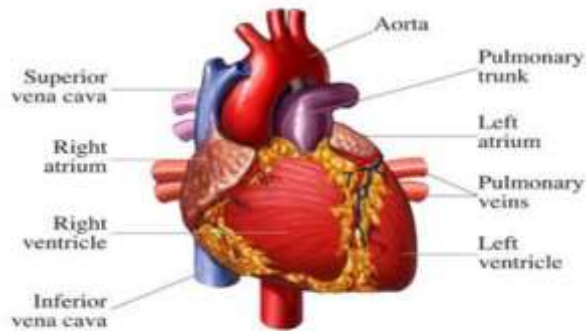


NERVOUS TISSUE

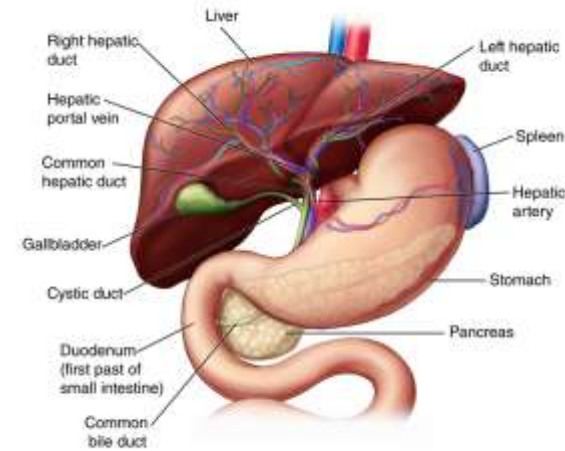
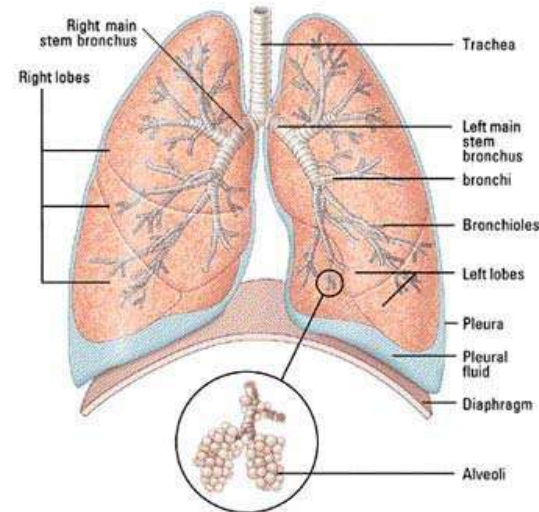
Fig. 1 Four main types of tissues found in humans

Organs: a group of tissues working to perform a function. Example: heart, liver, lung, stomach

Human Heart



Lungs



Systems: a group of organs working together to perform a specific function

Human Organ Systems



Skeletal system
provides structure to the body and protects internal organs



Muscular system
supports the body and allows it to move



Digestive system
breaks down food and absorbs its nutrients



Respiratory system
takes in oxygen and releases waste gases



Nervous system
controls sensation, thought, movement, and virtually all other body activities



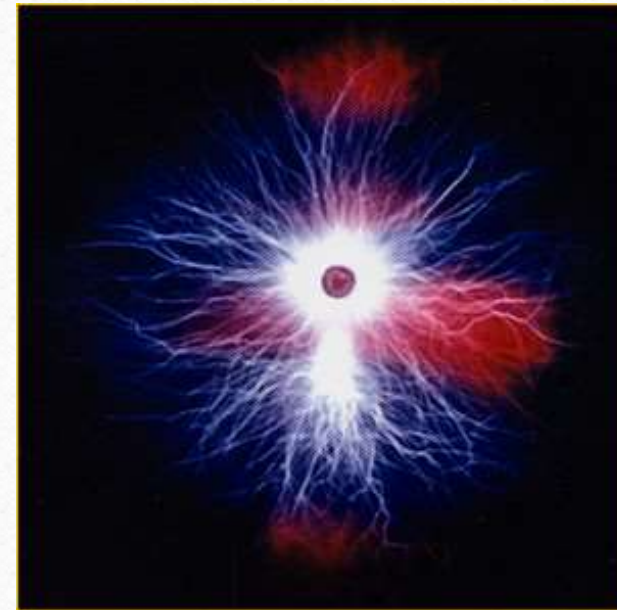
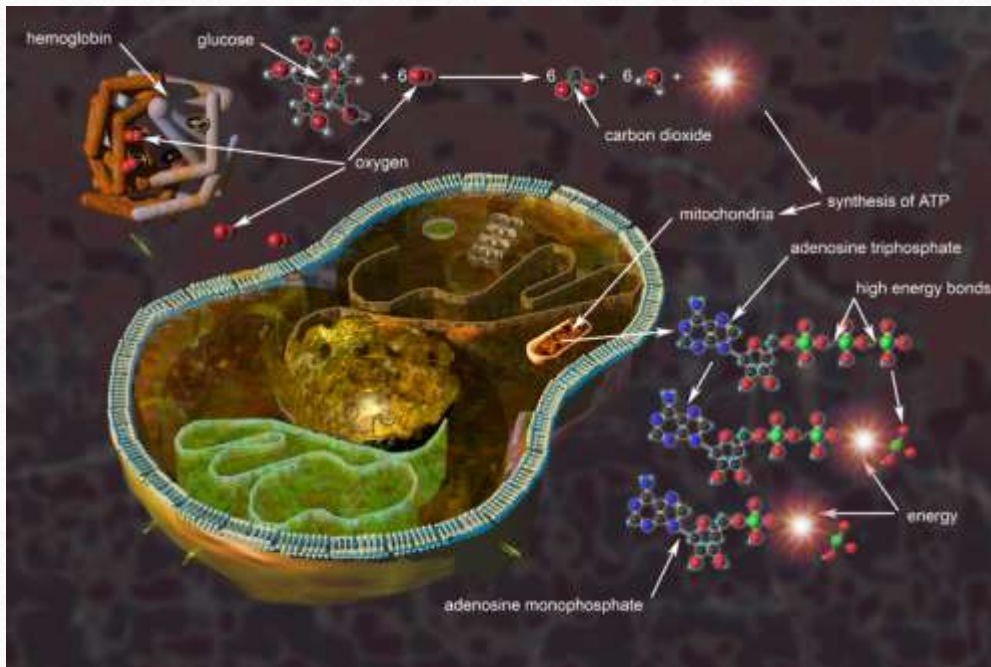
Circulatory system
transports oxygen, nutrients, and other substances to cells and carries away wastes

Organism: a group of systems working together to sustain life and maintain homeostasis.



Metabolism

- **The sum of all the activities that occur in a living cell is called metabolism.**
-



Respiration

- In aerobic respiration, energy is released from breaking down food with the help of oxygen.

