

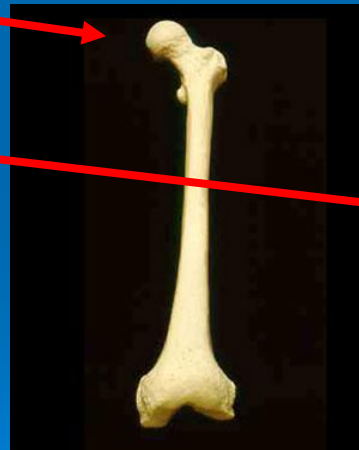
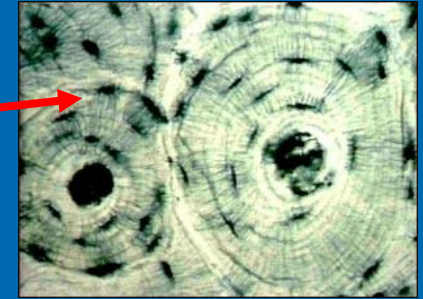
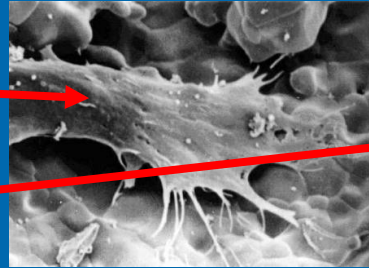


Levels Of Organization

Summarize the levels of organization within the human body (including cells, tissues, organs, and systems).

The levels of organization from simplest to most complex are:

- Cells
- Tissues
- Organs
- System
- Organism

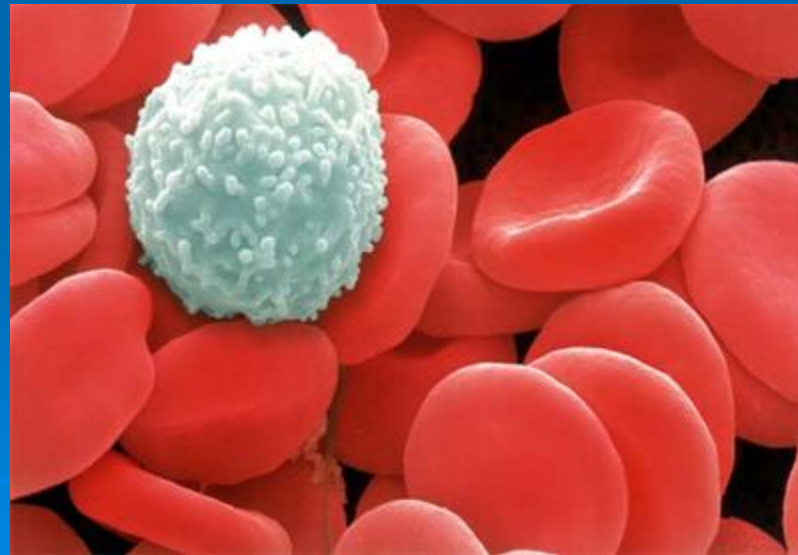
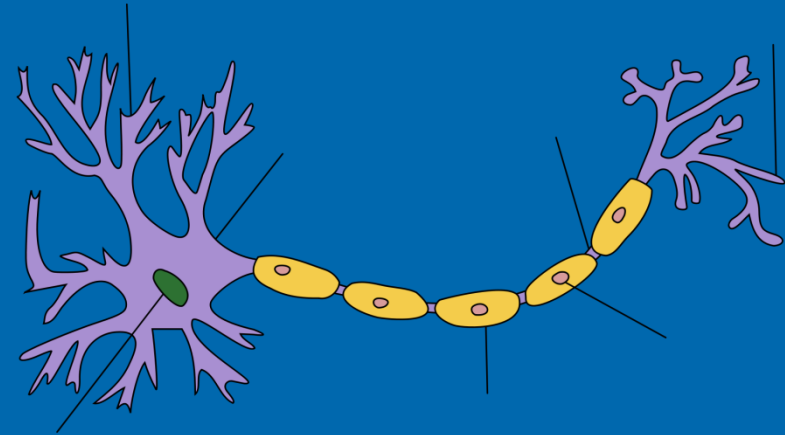




Cells

- The basic unit of structure and function in the human body
- Though all cells perform the processes that keep humans alive, they also have specialized functions as well.
- Examples may be nerve cells (neurons), blood cells, and bone cells.

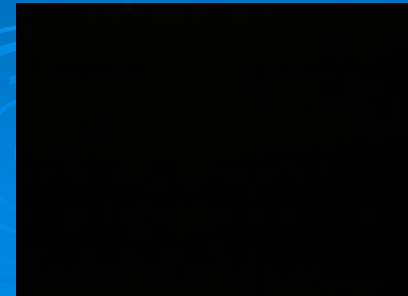
Cells





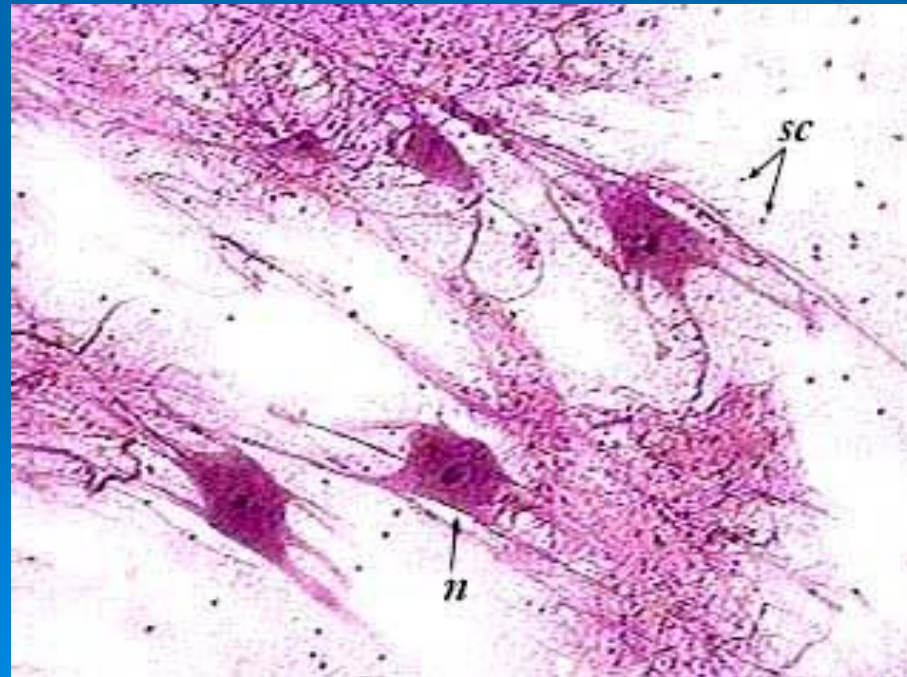
Tissues

- A group of specialized cells that work together to perform the same function.
- **There are four basic types of tissue in the human body:**



Tissues

1. **Nerve tissue** – carries impulses back and forth to the brain from the body



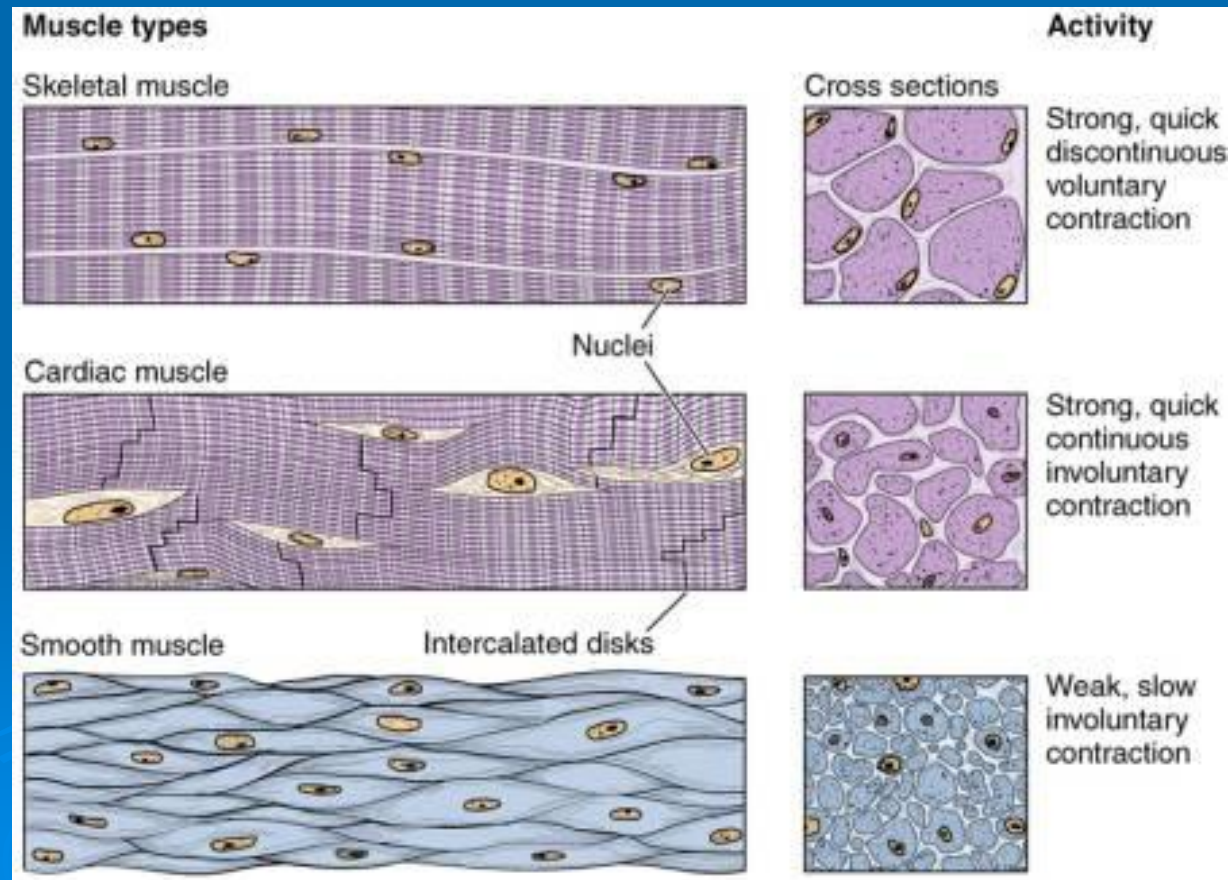
Three types of muscle tissue

➤ **Muscle tissue** – (cardiac, smooth, skeletal) contract and shorten, making body parts move

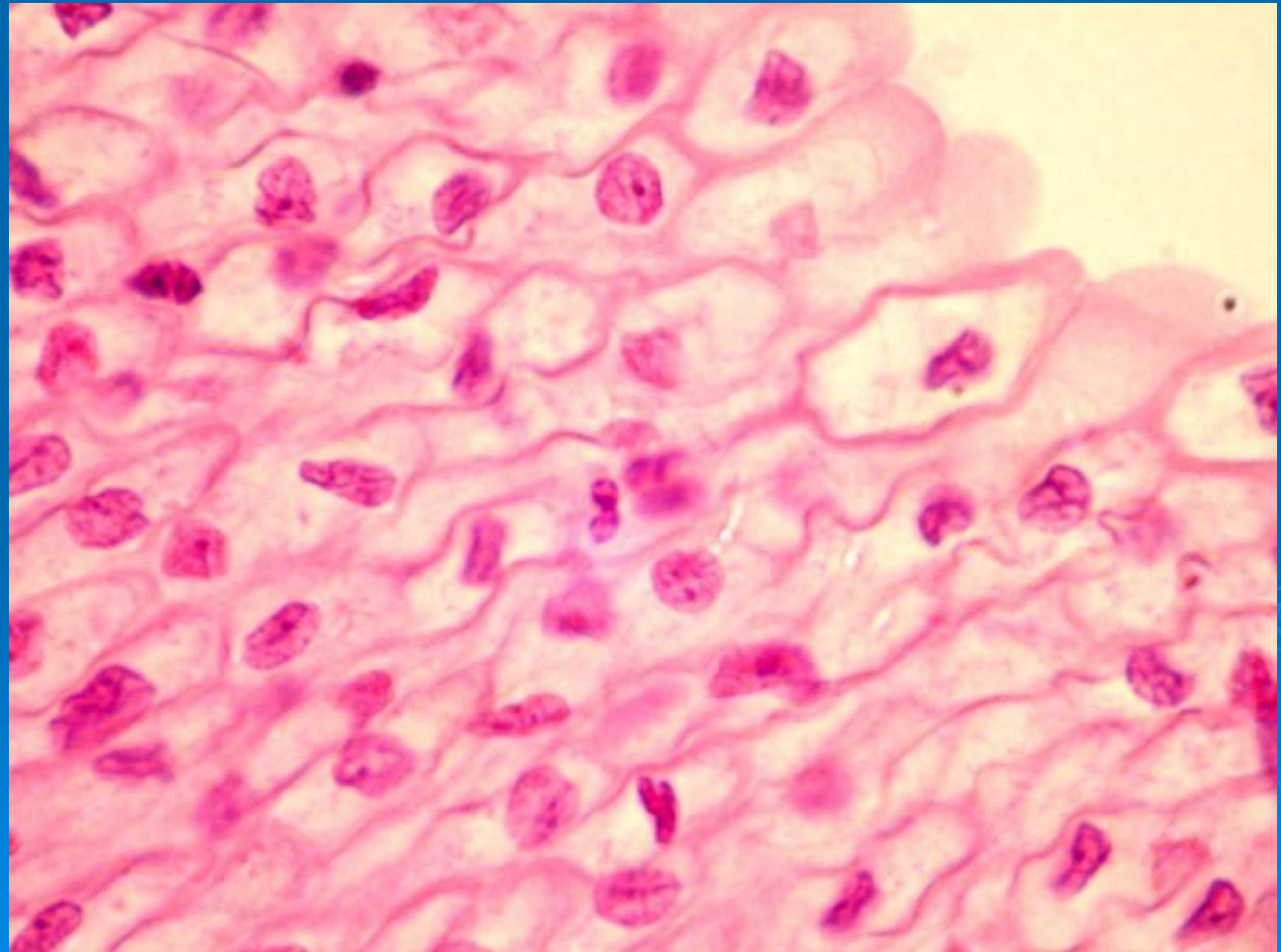
➤ **Skeletal**

➤ **Cardiac**

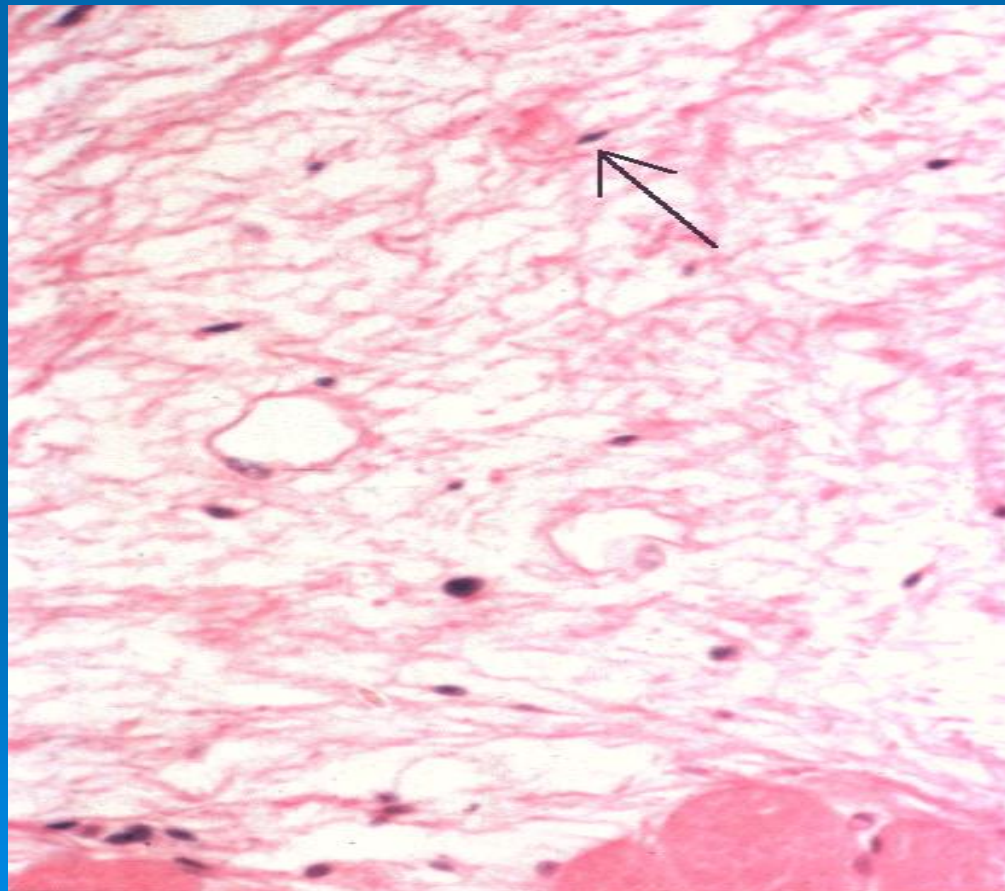
➤ **Smooth**



3. Epithelial tissue – covers the surfaces of the body, inside (as lining and /or covering of internal organs) and outside (as layer of skin)



Connective tissue – connects all parts of the body and provides support (for example tendons, ligaments, cartilage).

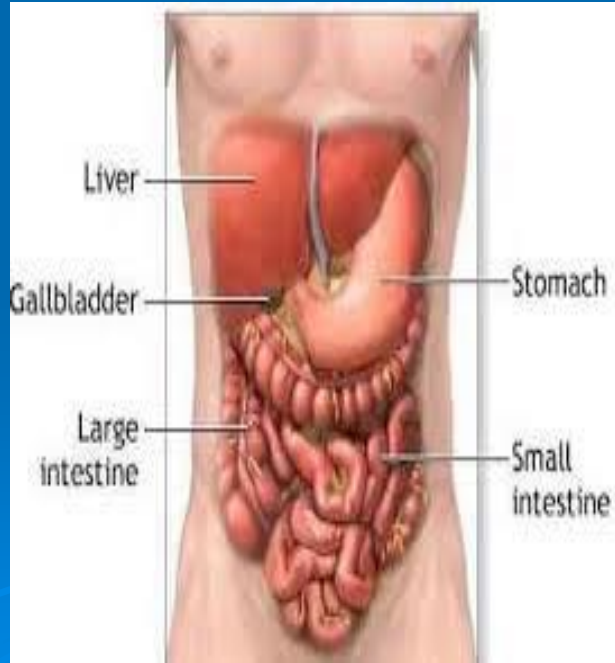
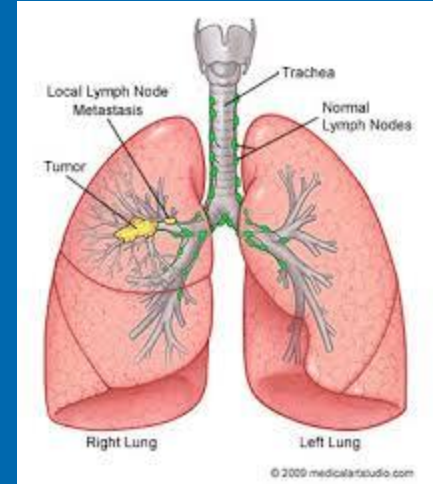
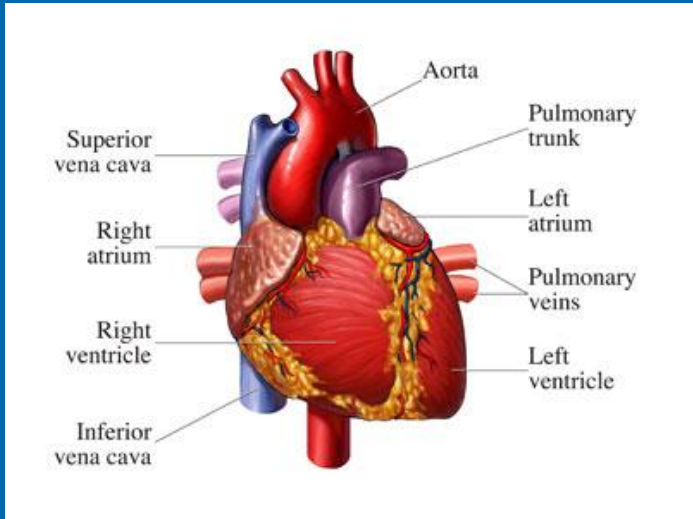




Organs

- A group of two or more different types of tissue that work together to perform a specific function.
- The task is generally more complex than that of the tissue.
- For example, the heart is made of muscle and connective tissues which functions to pump blood throughout the body.

Organs





Systems

- A group of two or more organs that work together to perform a specific function.
- Each organ system has its own function but the systems work together and depend on one another.
- There are eleven different organ systems in the human body: circulatory, digestive, endocrine, excretory (urinary), immune, integumentary, muscular, nervous, reproductive, respiratory, and skeletal.



Organism

- Any living thing that is capable of growing and becoming more complex. They are also capable of metabolizing nutrients and reproducing. They can be either single or multicellular

Organisms

