

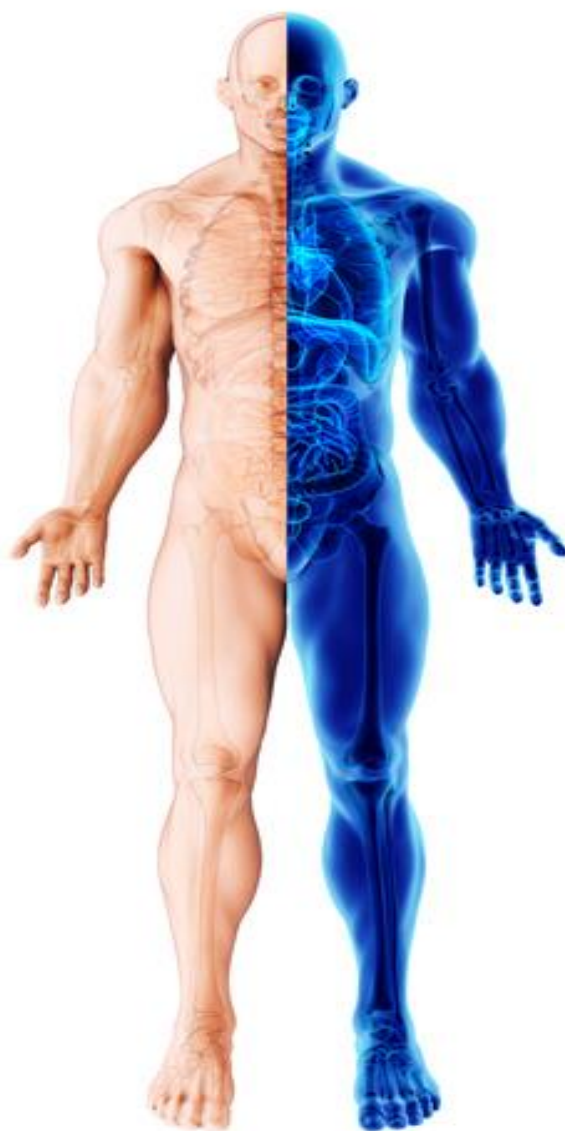
INTRODUCTION

PHYSIOLOGY

LECTURE NO 1

WHAT IS PHYSIOLOGY ?

- Branch of biology.
- It's the scientific discipline concerned with understanding how living organisms function.
- Process and mechanisms that enable organisms to maintain their life and respond to change in their environment.
- Its basically how body and its parts works. For example: heart or lungs

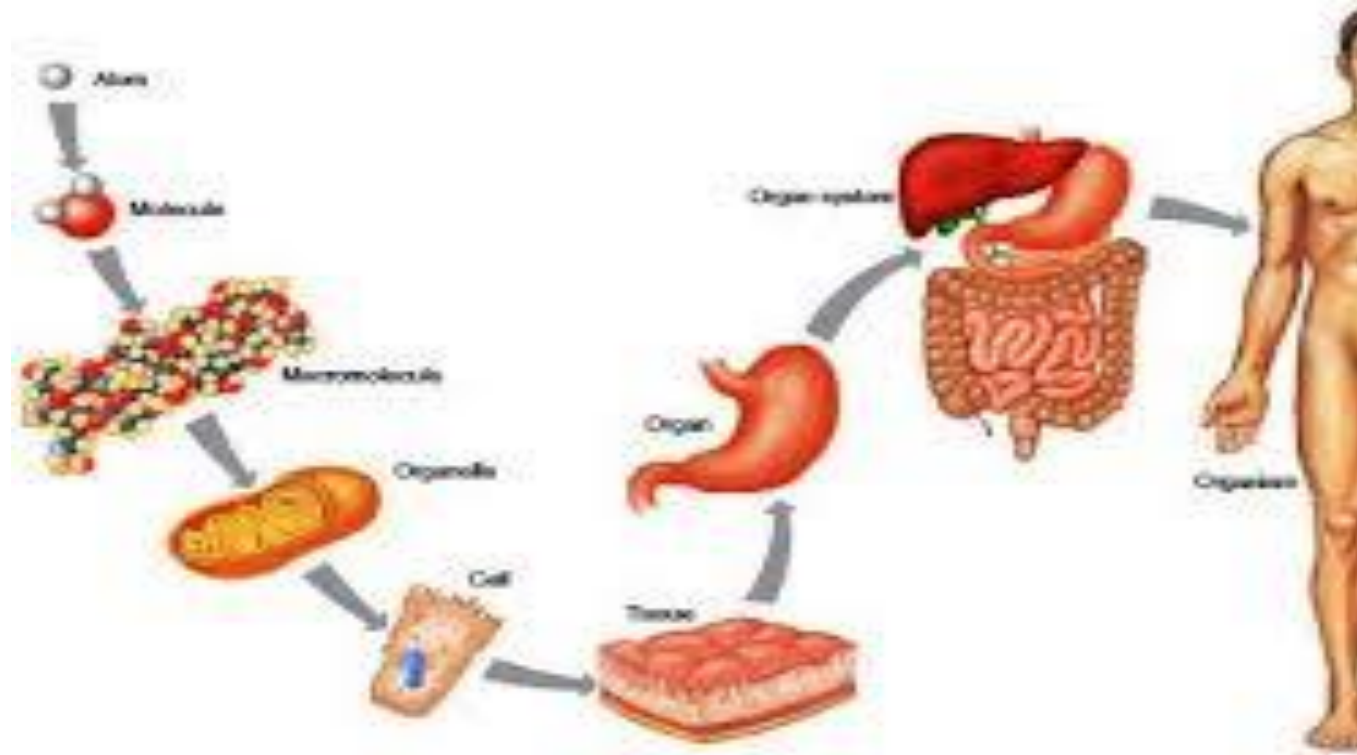


LEVELS OF ORGANIZATION

1. Molecular level.
2. Cellular level.
3. Tissue level.
4. Organ level.
5. System level.

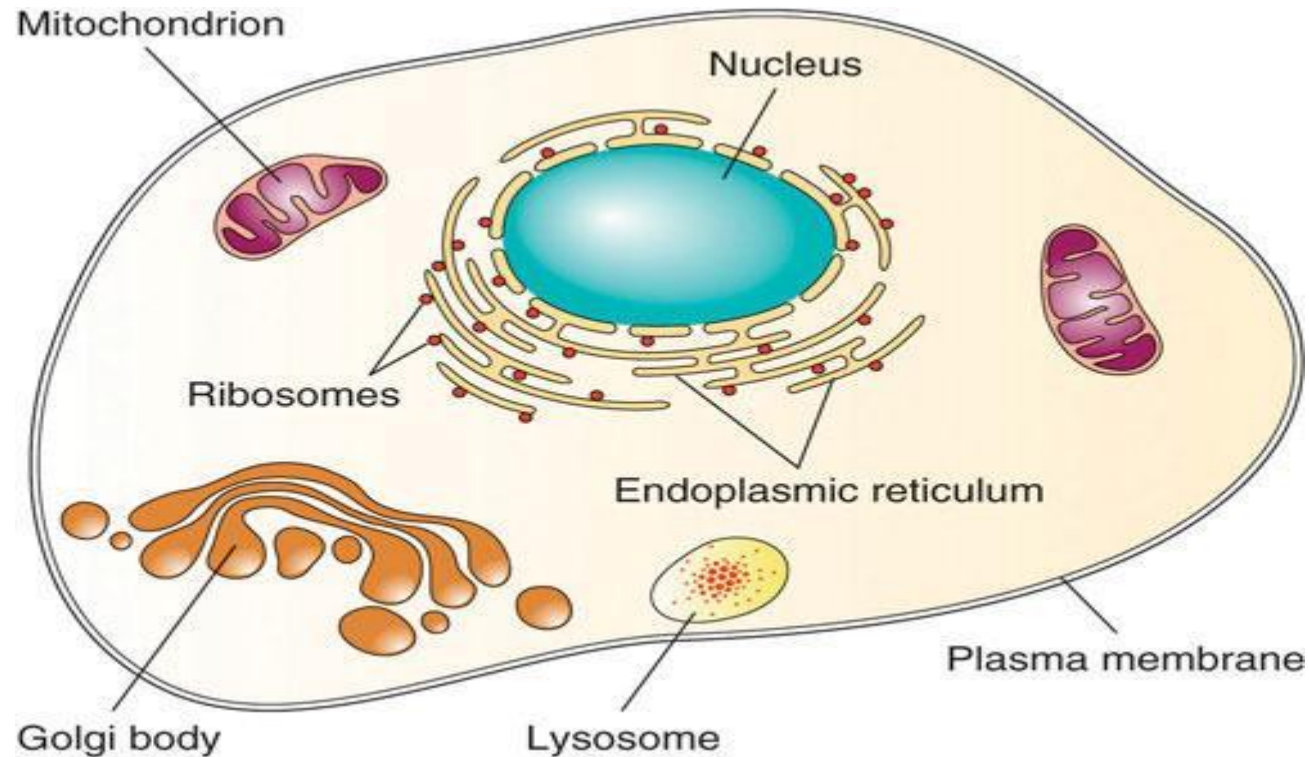
MOLECULAR LEVEL

- Biochemical process such as metabolism, gene expression. And protein synthesis.



CELLULAR LEVEL

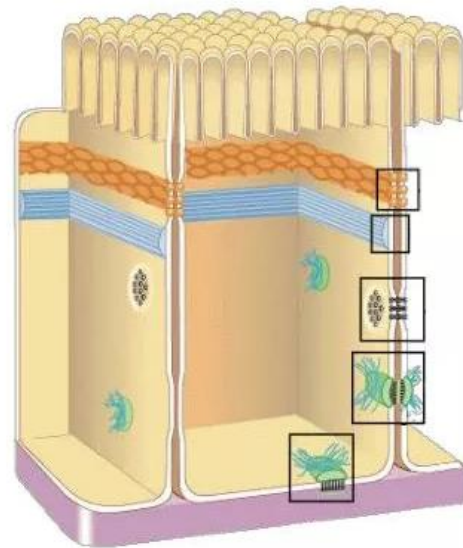
- Investigating the functions of individual cell, including transport process, signaling pathways and cell to cell communication.



TISSUE LEVEL

- Properties and functions of tissue which are group of cells that works together for a specific function.

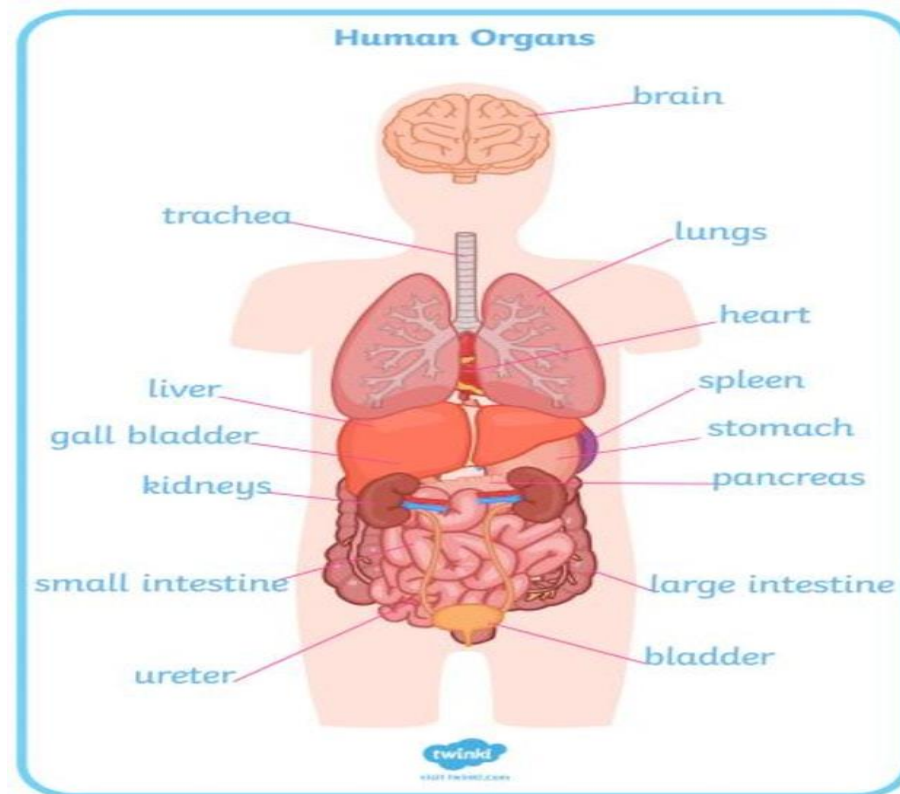
The Tissue Level of Organization



- Group of similar cells
 - common embryonic origin
 - common function
- Histology
 - study of tissues
- Pathologist
 - looks for tissue changes that indicate disease

ORGAN LEVEL

- Exploring functions of organs for example: heart , lungs , kidneys, brain and liver.

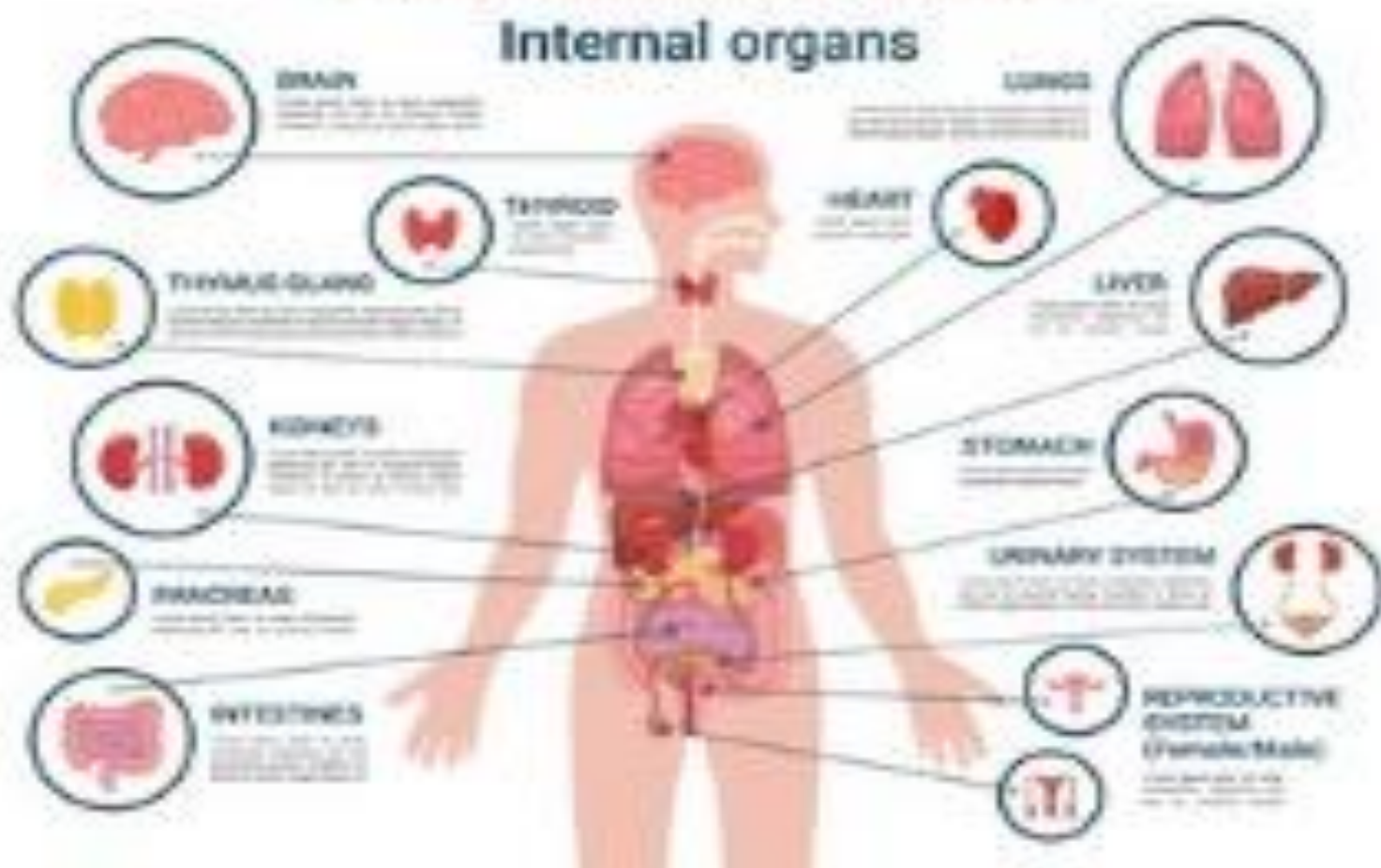


SYSTEM LEVEL

- Function of organ system ,nervous system, endocrine system, cardiovascular system, respiratory system, digestive system, urinary and reproductive system.

THE HUMAN BODY

Internal organs



Thank You

