

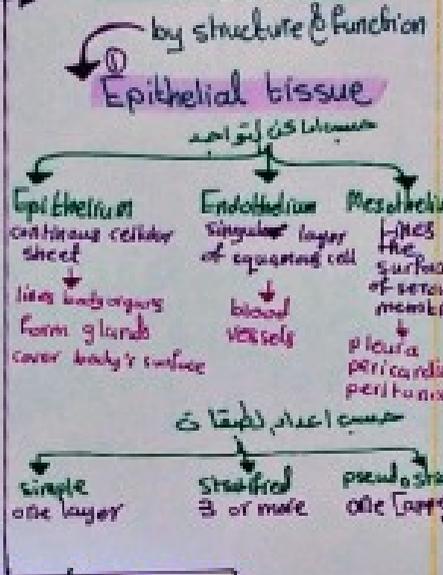
Cell

- cell organelles**
 - Nucleus (L)** → kernel stores DNA [carries the genetic materials] & is responsible for cellular reproduction or division.
 - Mitochondria** → cell's power plant → production of ATP, the high energy molecule that fuels cellular activity.
 - Ribosome & Endoplasmic reticulum** → synthesis of protein & metabolism of fat within the cells.
 - The Golgi apparatus** → holds enzyme system → assist in completing the cellular metabolic functions.
 - Lysosomes** → contain enzymes that allow cytoplasmic digestion.

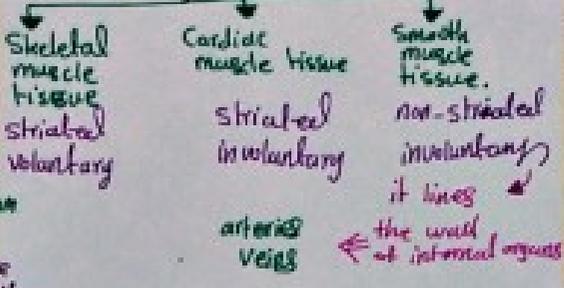
- cell division & reproduction** → to replace cells that are lost by wear
 - mitosis**
 - prophase
 - metaphase
 - anaphase
 - telophase
 - meiosis** → occurs in gametes
 - ova
 - spermatozoa

mitosis → thread
meiosis → lessening

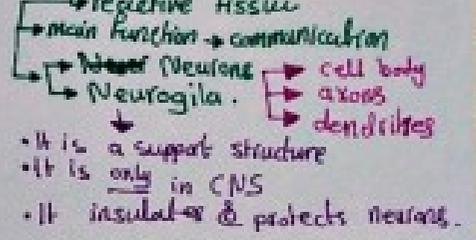
Tissue



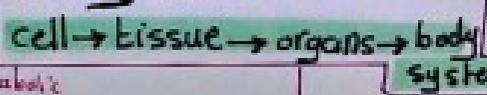
③ Muscle tissue



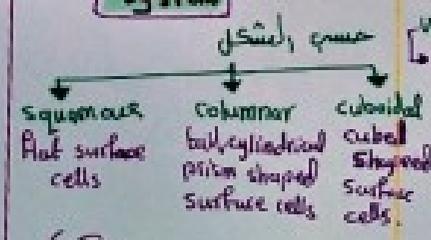
④ Nervous tissue



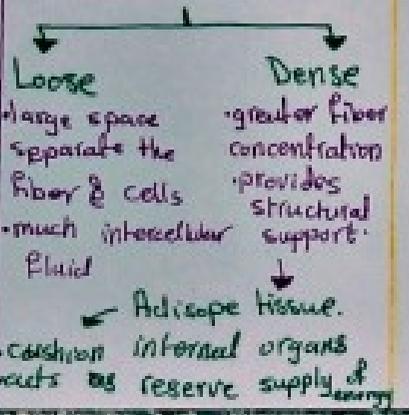
Body Structure



organs & systems

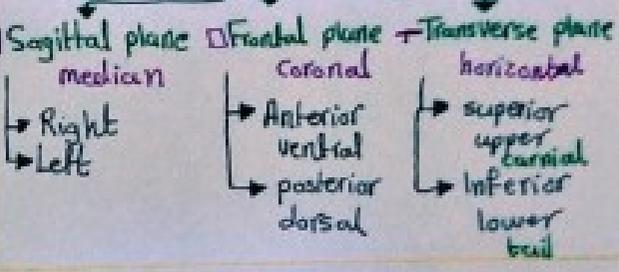


② Connective tissue

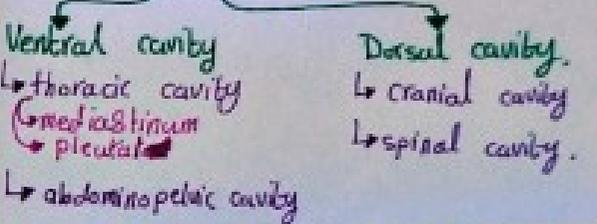


- varying numbers of organs & accessory structures → body system.
- The hemopoietic & immune system
 - The nervous system & special senses
 - The genitourinary system
 - The gastrointestinal system
 - The cardiovascular system
 - The respiratory system
 - The endocrine system
 - The integumentary system → [skin / hair / nail / sweat gland] → protects the body, helps regulate body temperature
 - The musculoskeletal system

Body planes & sections



Body cavities



quadrants

| | | | |
|-------------|------------|-------------|------------|
| right upper | left upper | right lower | left lower |
|-------------|------------|-------------|------------|

regions

| | | | |
|-----------------------|----------------------|------------------|--------------------|
| right upper | left upper | right lower | left lower |
| epigastric region | hypochondriac region | umbilical region | hypogastric region |
| right inguinal region | left inguinal region | | |

Positions

- anatomical position
- Flower's position
- Trendelenburg's position
- Reverse Trendelenburg's position
- Lithotomy position
- Supine position
- Prone position