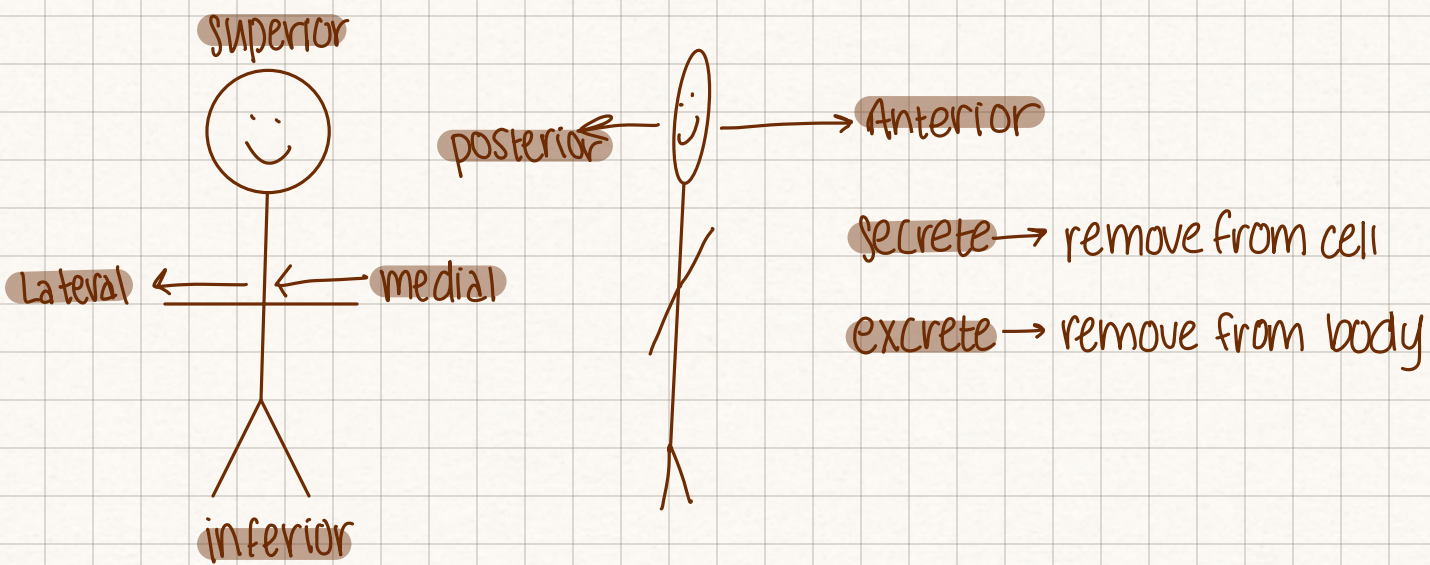


- **Composition of the body**
 - organs, tissues, cells, organelles, molecules, atoms.
- **Zygote** - fertilized egg resulting from the union of a female egg & male sperm.
- **Basic functions of life**
 - manufacture
 - production
 - communication
 - replication
 - reproduction
- **Nucleus** → directs all activities of the cell.
 - manufactures ribosomes which manufacture protein.
- **Primary tissue groups**
 - connective, epithelial, muscle, muscle, nervous



- **Osteoblast** → bone cell that builds bone
 - **Osteoclast** → bone cell that removes bone
 - **Osteocyte** → maintains bone
- } **Variations of bone**
↓
"Osteo"

- **11 organ systems of the body**
- **DNA** → Genetic info in our cells
- **mitosis** → cell division & replication
- **Mutation** → Altering to DNA sequence
- **cytogenetics** → study of genetic sequence
- **gene therapy** → therapy changing mutations
- **predictive medicine** → allows us to see how disease might occur

Smartbook Notes

- **molecules** are made up of atoms
- **metabolism** → metabol + ism
- **Chromatin** → substance composed of DNA that forms chromosomes during cell division
- **Steroidal** → family of chemical substances found in drugs, hormones, & body components
- **Anabolism** → build up of complex substance in the cell from simpler ones as a part of metabolism.
- **steroid** → ster-oid
- **tendon** → fibrous band that connects muscle to bone
- **Capsule** → caps - ule
- **epigenetics** → study of disorders from chemical compounds.