

# **SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES**

Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai  
Approved by Pharmacy Council of India, New Delhi. Coimbatore -641035

**COURSE NAME: HUMAN ANATOMY & PHYSIOLOGY**

**(BP301 T)**

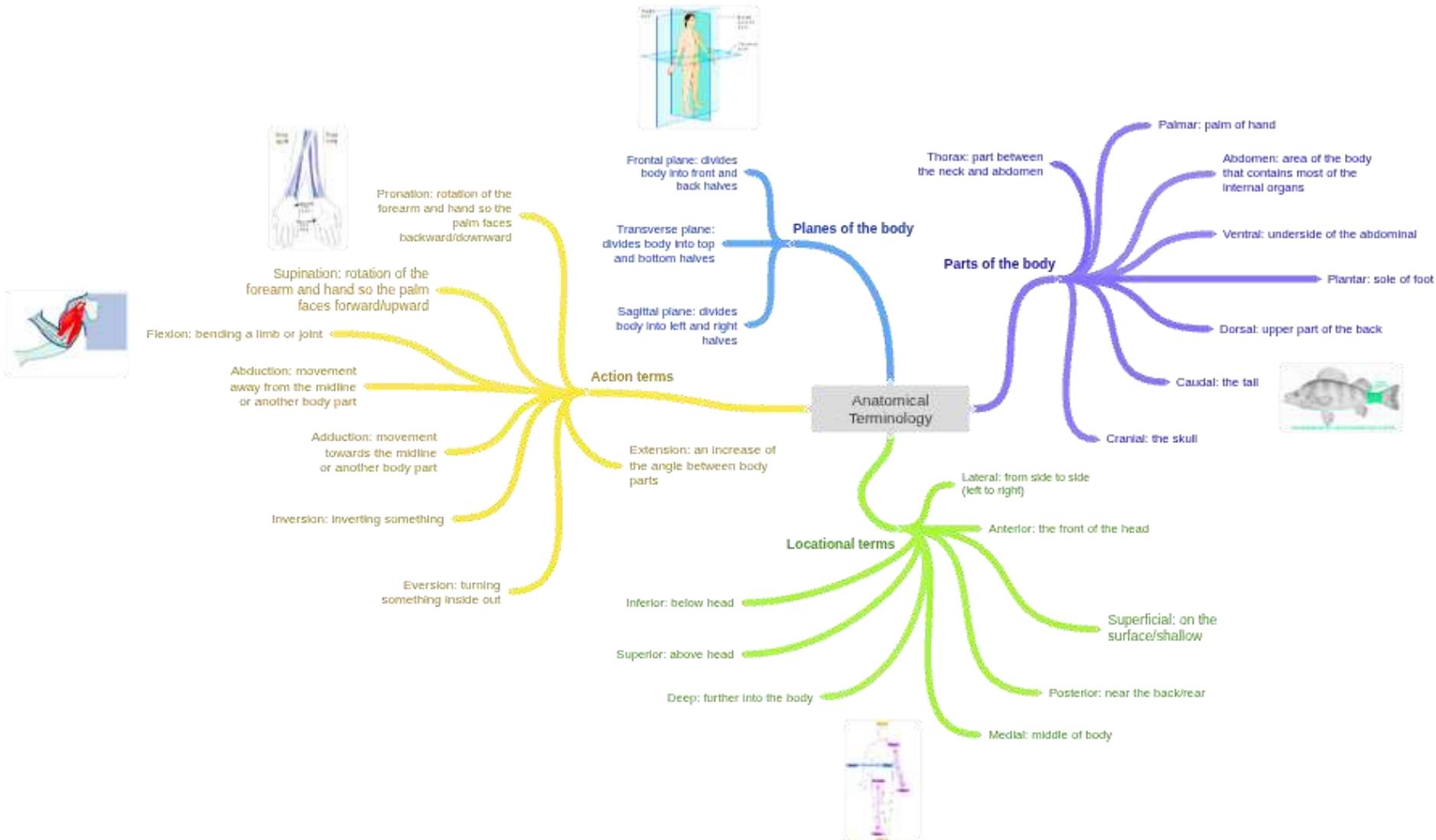
**YEAR : I SEM/I YEAR**

**TOPIC 5 : BASIC ANATOMICAL TERMINOLOGY**

# DESIGN THINKING IN BASIC ANATOMICAL TERMINOLOGY

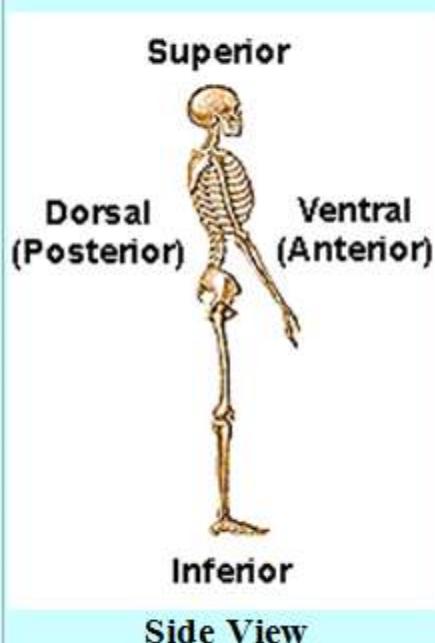
- ✓ **Empathize:** Deeply understand the student's challenges, needs, and experiences in learning anatomical terms.
- ✓ **Define:** Reframe the problem based on insights from the empathize phase and establish clear context.
- ✓ **Ideate:** Brainstorm and explore a wide range of ideas and potential solutions, including visual aids or mnemonic devices for remembering terms.
- ✓ **Prototype:** Simulate and build models or diagrams of body positions and planes to enhance learning and retention.

# MINDMAP

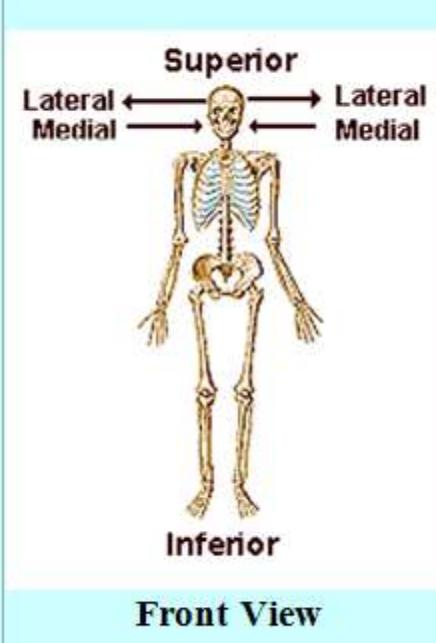


# BASIC TERMINOLOGIES IN ANATOMY

Directional Terms of the Body	
Direction	Description
Ventral	Toward the belly (front)
Dorsal	Toward the back
Rostral	Toward the nose
Caudal	Toward the tail
Superior	Toward the top of the head/body
Lateral	Away from the middle
Medial	Toward the middle
Bilateral	On both sides
Ipsilateral	On the same side
Contralateral	On the opposite side



**Side View**



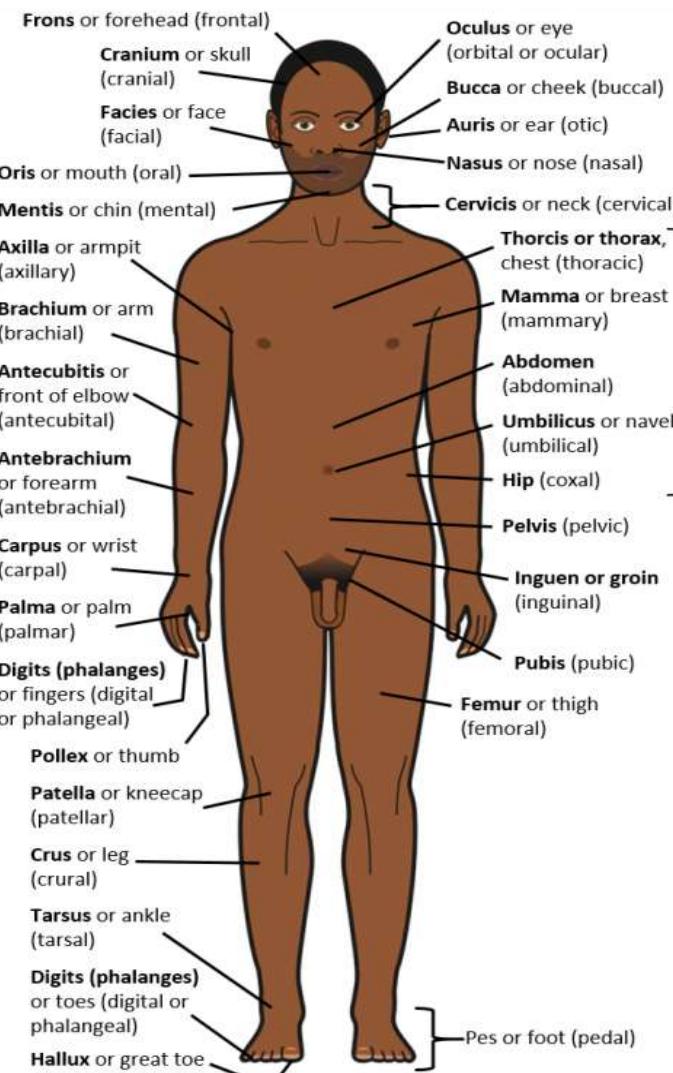
**Front View**

# REGIONAL POSITION

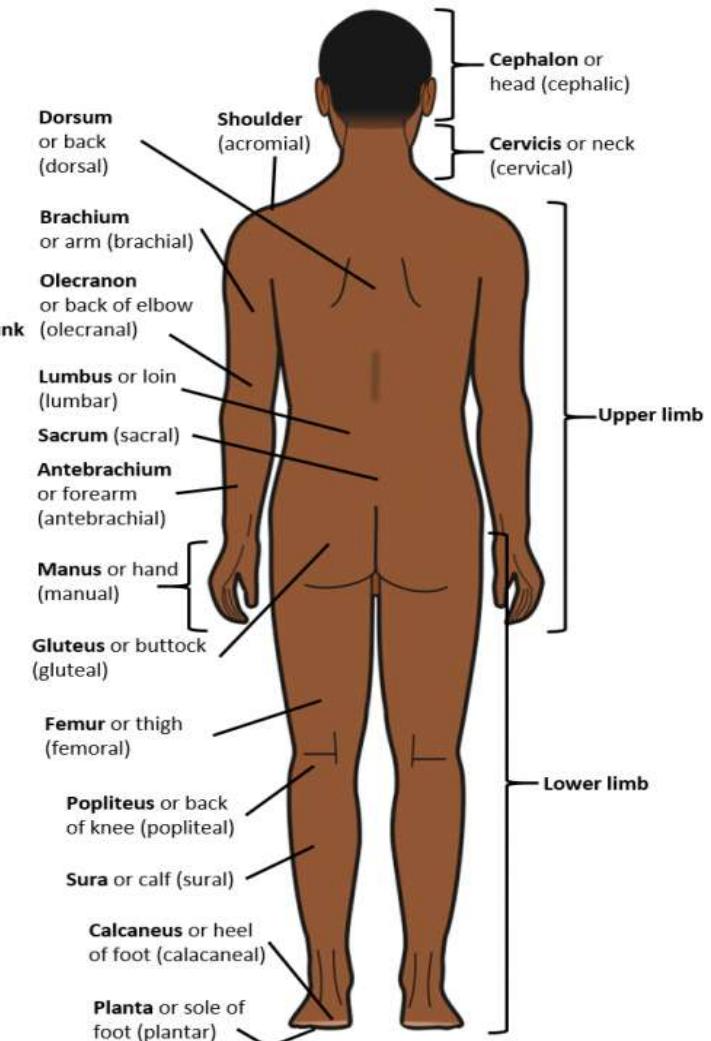
## Anatomical Position



- Standing upright
- Head and eyes directed straight ahead
- Upper limbs at the sides
- Upper limbs slightly away from trunk
- Palms facing forward
- Thumbs pointing away from body
- Lower limbs parallel
- Feet flat on the ground and facing forward



(a) Anterior view

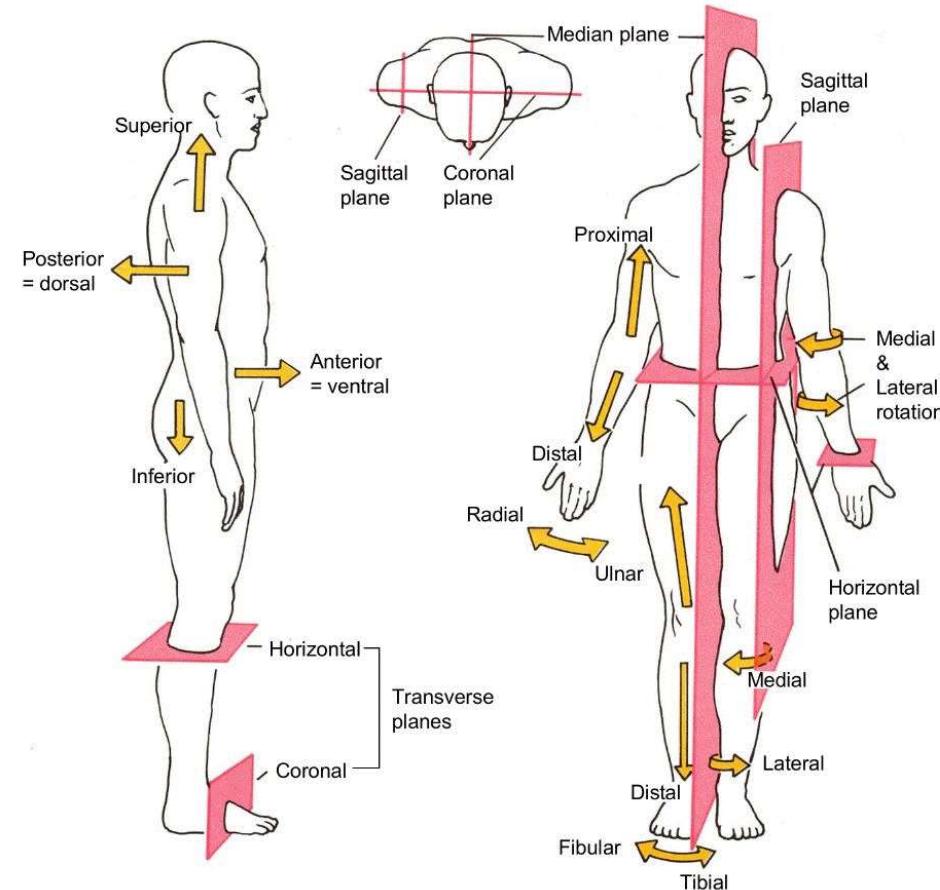


(b) Posterior view

# DIRECTIONAL TERMS

Directional terms are used to describe the relative location of one body part to another.

Direction	Description
Ventral	Toward the belly (front)
Dorsal	Toward the back
Rostral	Toward the nose
Caudal	Toward the tail
Superior	Toward the top of the head/body
Lateral	Away from the middle
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# BODY PLANES

Body planes are imaginary flat surfaces that pass through the body. They are used to divide the body into sections for anatomical study.

## Sagittal Plane:

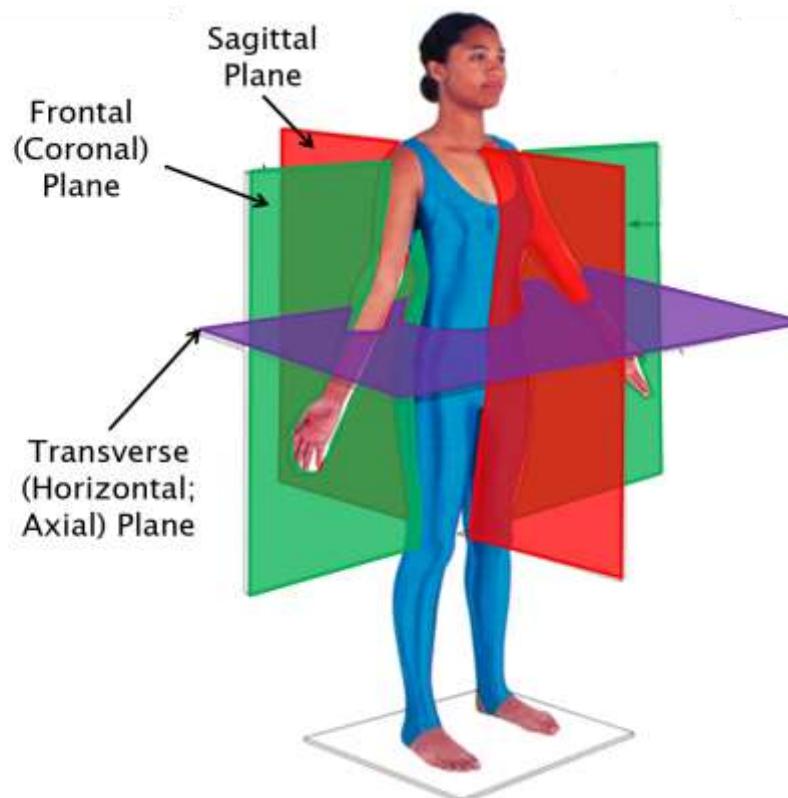
- Divides body into right and left parts
  - Mid-sagittal (through midline)*
  - Parasagittal (off the midline)*

## Frontal (Coronal) Plane

- Divides body into anterior and posterior parts

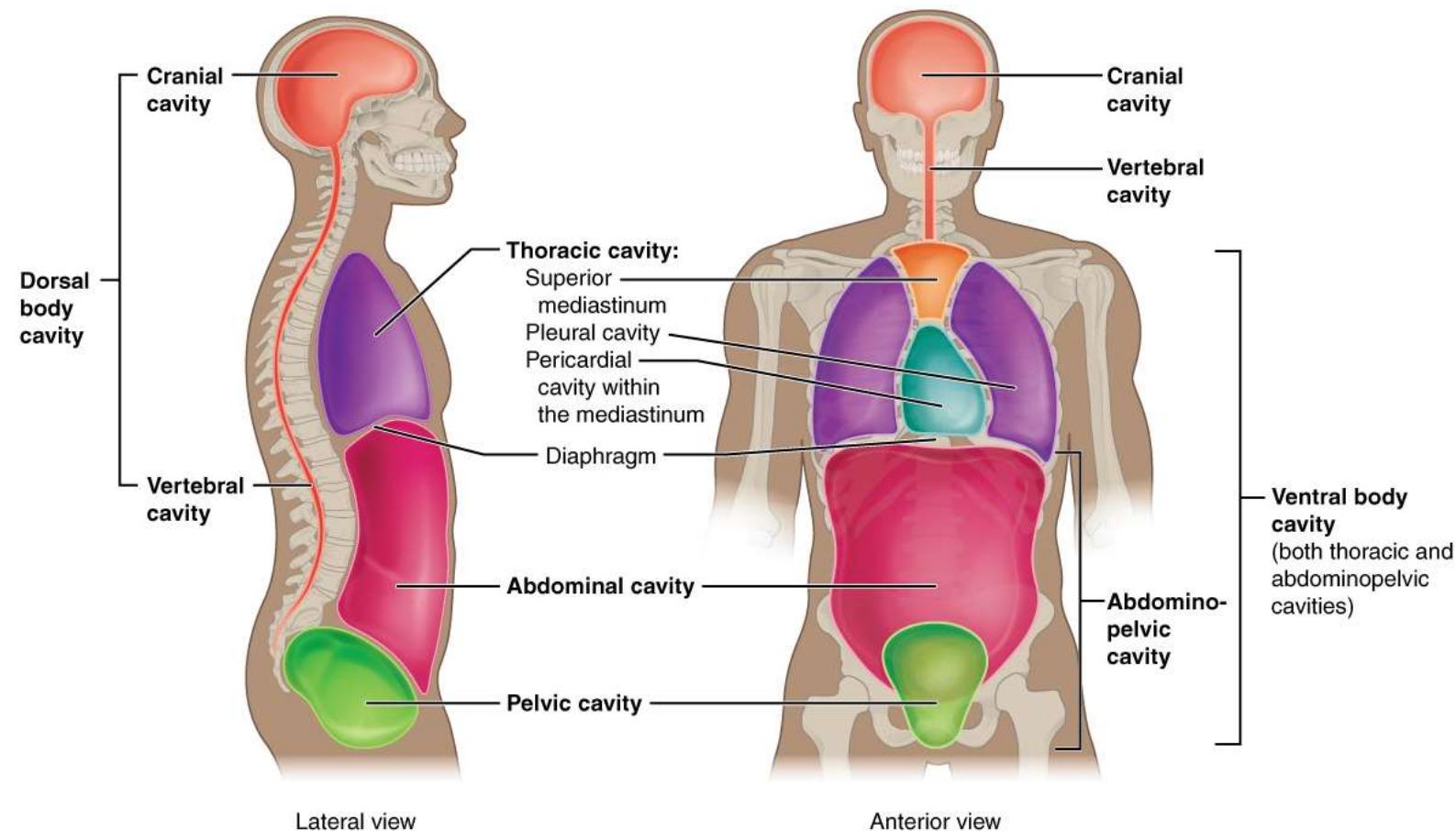
## Transverse (Horizontal; Axial) Plane

- Divides body into superior and inferior parts



# BODY CAVITIES

Body cavities are spaces within the body that contain and protect internal organs.



## SUMMARY

- ✓ Basic anatomical terminology includes position, directional terms, planes, regions, and cavities for precise description of the body.
- ✓ It ensures effective communication in pharmacy and healthcare, aiding in understanding physiological processes and drug interactions.

# CLASS ASSESSMENT

## Directional terms.

Directional terms tell us where body parts are located with reference to the body in anatomical position.

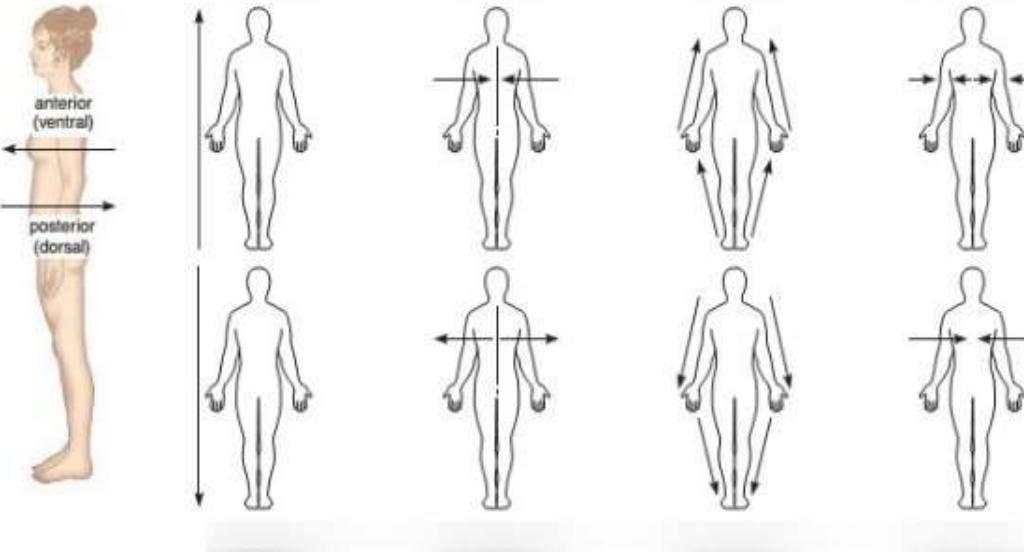
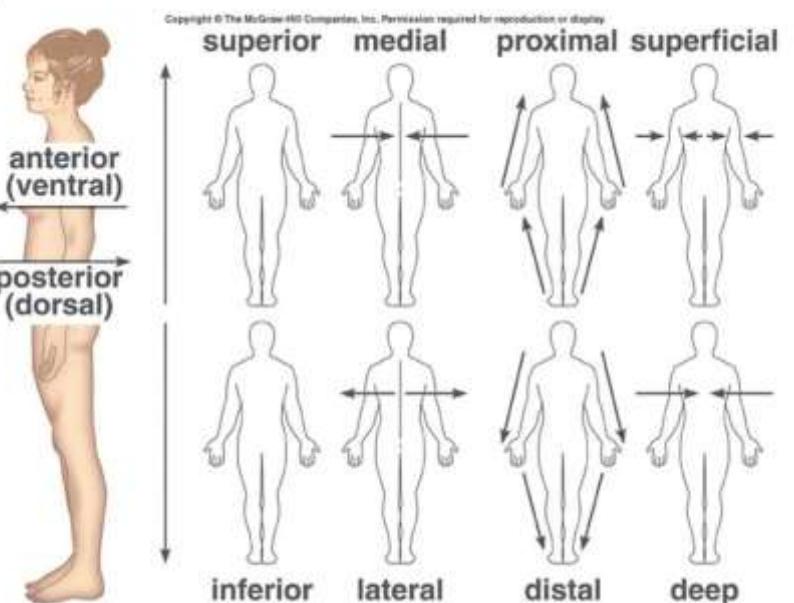


Fig. 1.2



## REFERENCE

- ✓ Essentials of Medical Physiology, K. Sembulingam & P. Sembulingam (Jaypee Brothers Medical Publishers)
- ✓ A Textbook of Human Anatomy and Physiology-I, SIA Publishers
- ✓ Human Anatomy & Physiology Gerard J. Tortora & Bryan H. Derrickson (Wiley)
- ✓ Ross and wilson anatomy and physiology in health and illness, Anne Waugh &Allison Grant.

