

**BASIC  
ANATOMICAL  
TERMINOLOGY**

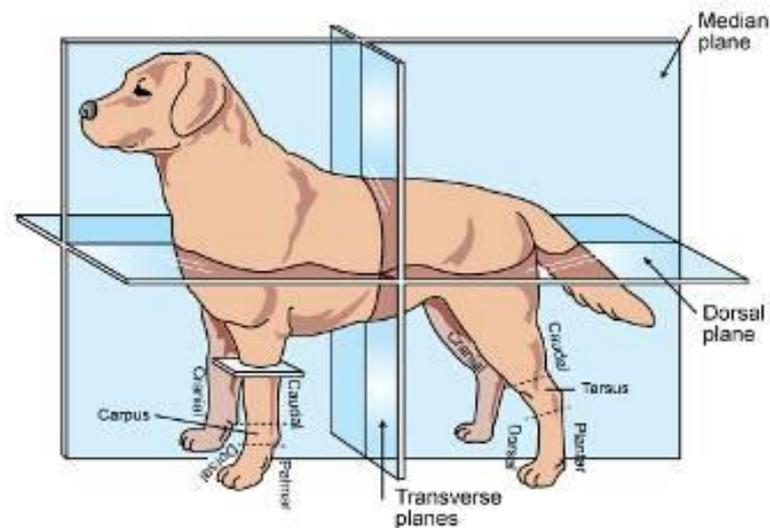
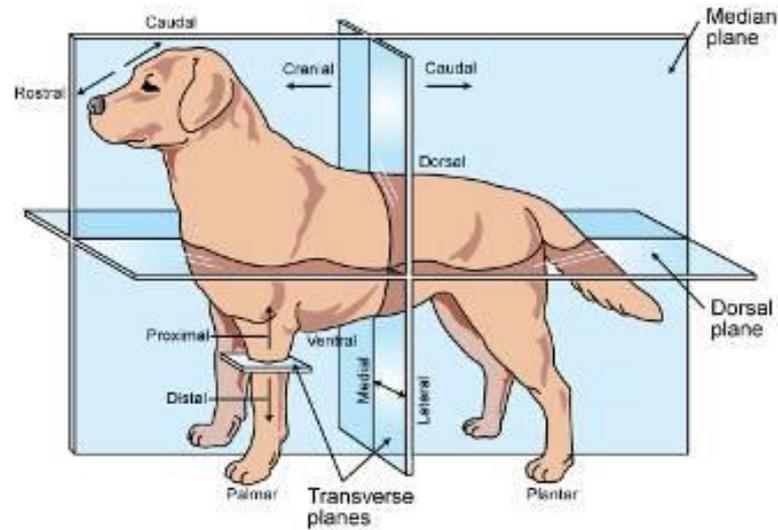
# PLANES

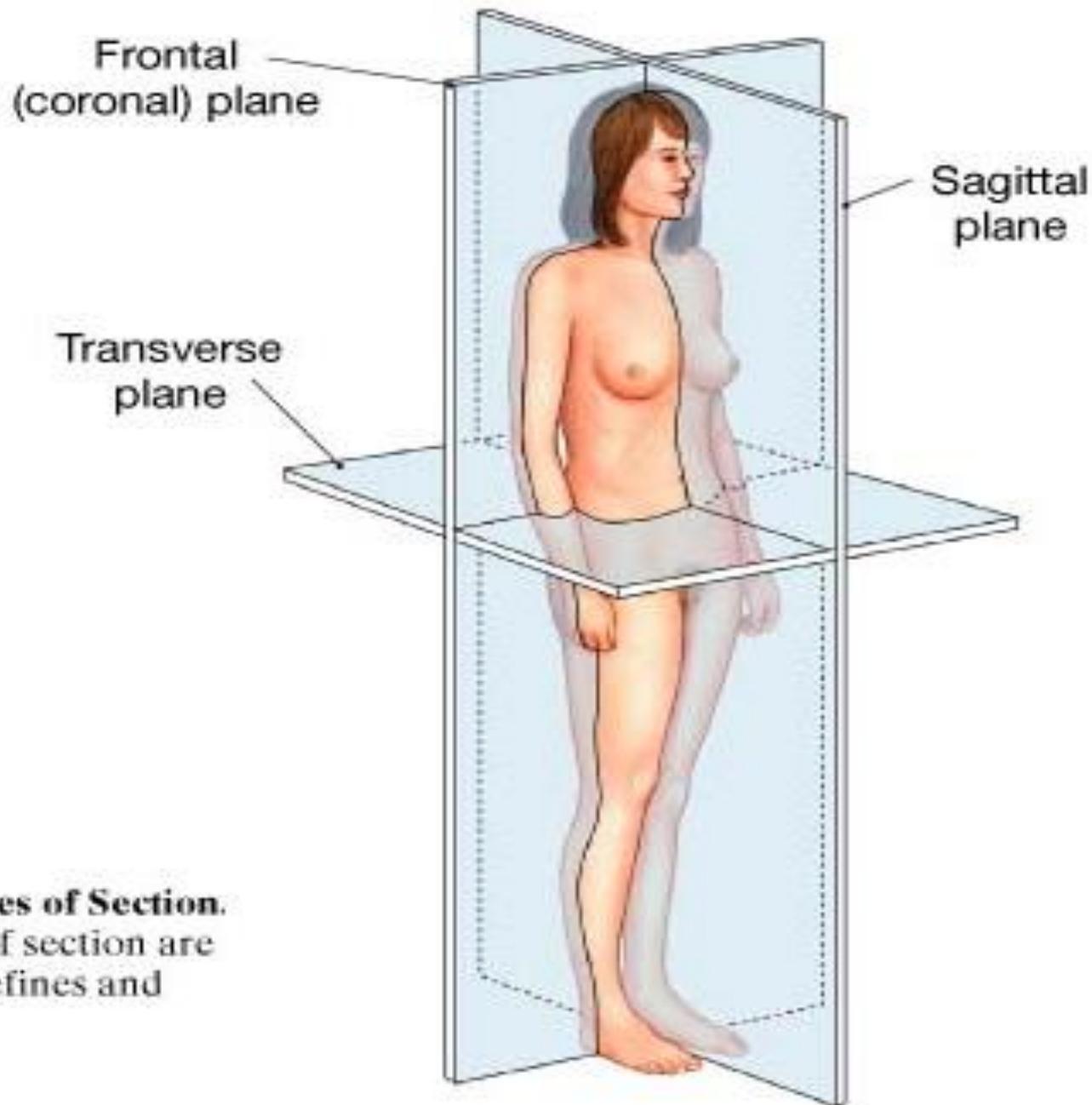
- **Planes** are imaginary flat surfaces that are used to divide the body or organs into definite areas & include:
  - **Midsagittal** (medial) and **parasagittal**, **frontal** (coronal), **transverse** (cross-sectional or horizontal) and **oblique**.

# SECTIONS

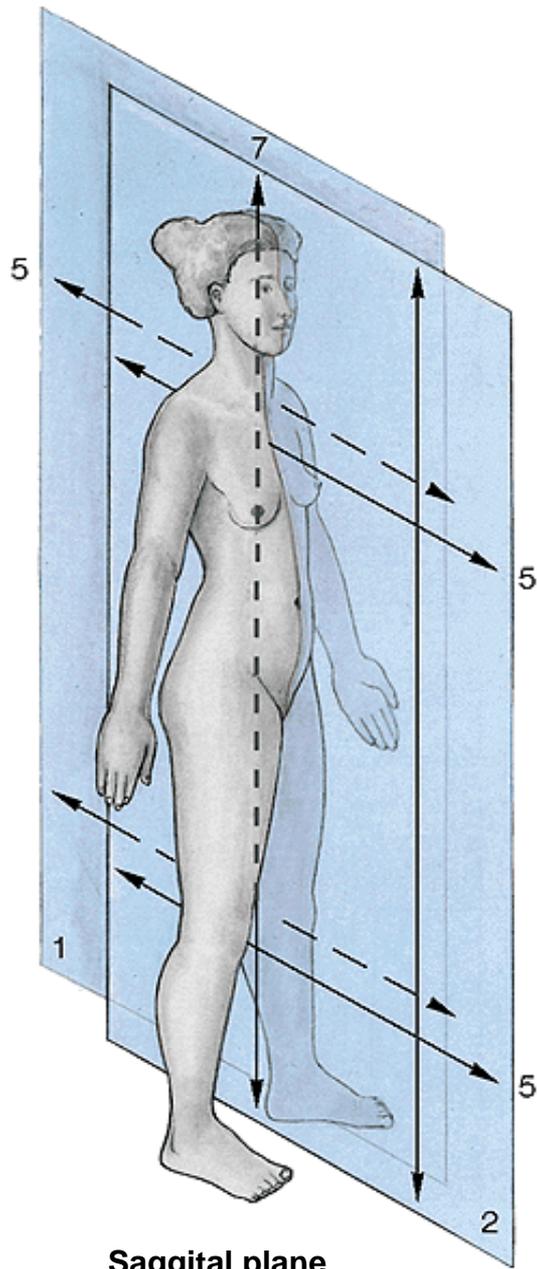
- **Sections** are flat surfaces resulting from cuts through body structures. They are named according to the plane on which the cut is made and include **transverse**, **frontal**, and **midsagittal**

# The anatomical planes of reference

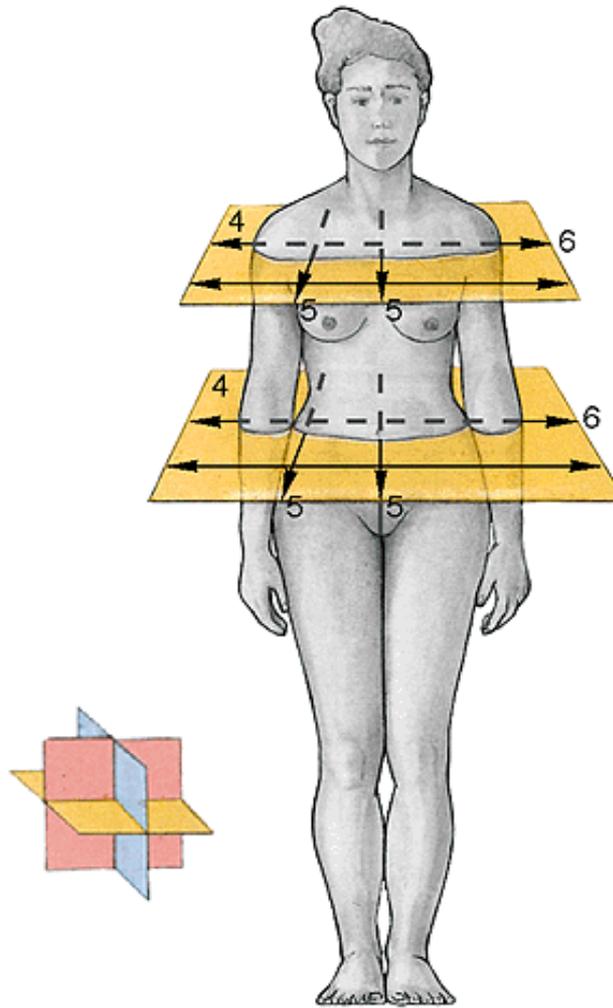




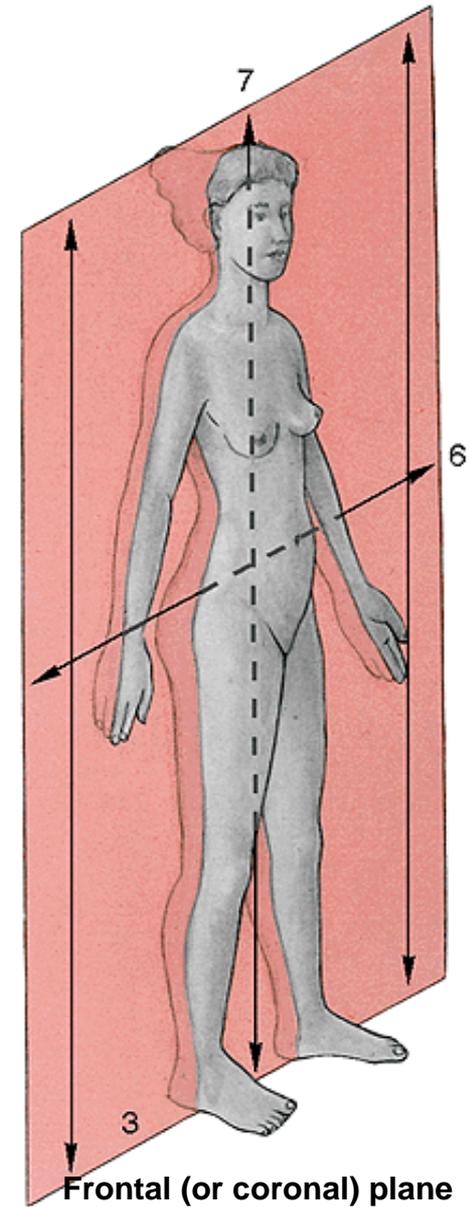
• **FIGURE 1-10** **Planes of Section.** The three primary planes of section are indicated here. Table 1-3 defines and describes them.



Saggital plane



Horizontal (or cross) section



Frontal (or coronal) plane

# DIRECTIONAL TERMS

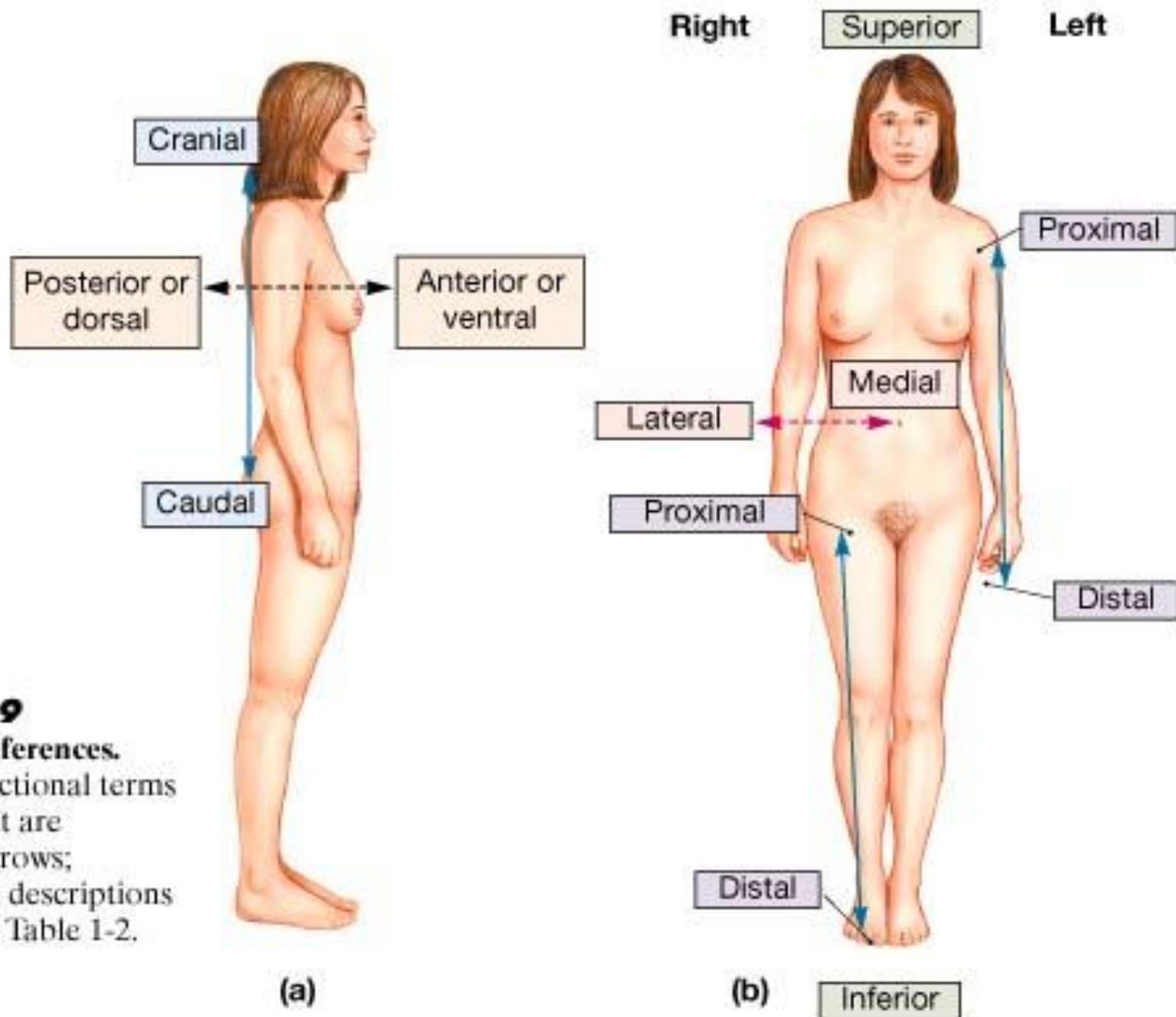
- Directional terms are used to precisely locate one part of the body relative to another and to reduce length of explanations.

# DIRECTIONAL TERMS

- Superior/Cephalic/Cranial
- Inferior/Caudal
- Anterior/Ventral/Rostral
- Posterior/Dorsal
- Superficial: toward surface
- Deep: away from surface

# DIRECTIONAL TERMS

- Medial: toward midline
- Lateral: away from midline
- Intermediate: between 2 points
- Ipsilateral: same side
- Contralateral: opposite side
- Proximal: near origin
- Distal: away from origin



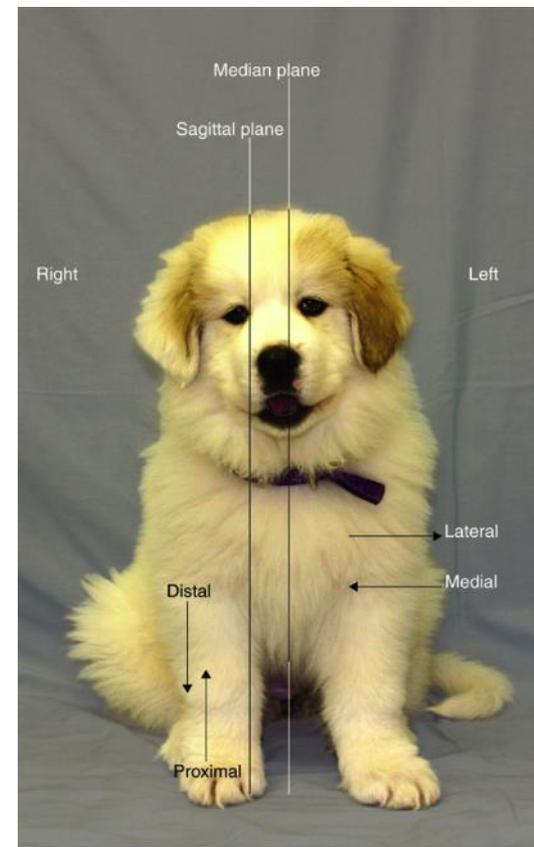
**• FIGURE 1-9**  
**Directional References.**  
 Important directional terms used in this text are indicated by arrows; definitions and descriptions are included in Table 1-2.

# DIRECTIONAL TERMS

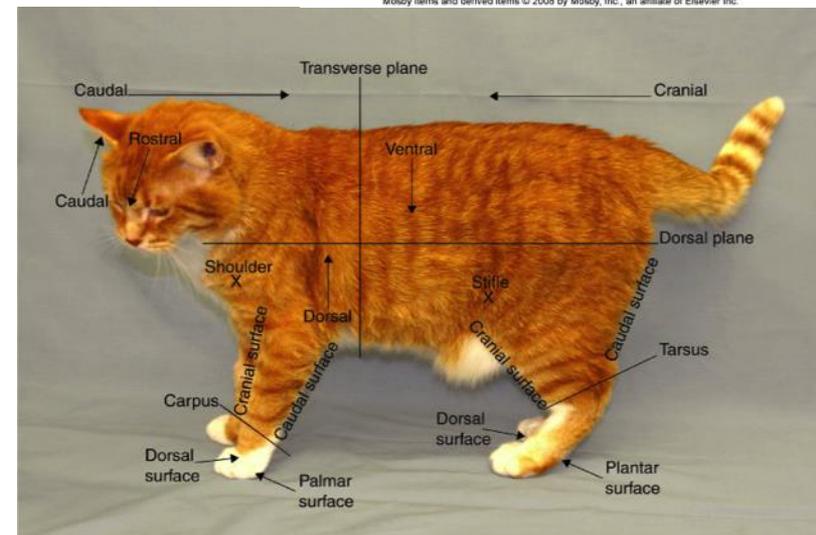
- External (Outer)
- Internal (Inner)
- Central
- Peripheral
- Parietal
- Visceral

# Directional Terms

- **Left** and **right** refer to the ANIMAL's left and right.
- **Cranial** and **caudal** refer to the two ends of the animal as it stands on four legs.
  - cranial = toward the head
  - caudal = toward the tail
  -
- **Rostral** means towards the tip of the nose and only describes positions or directions on the head.
- **Dorsal** and **ventral** refer to “up and down” or towards the back and towards the belly.



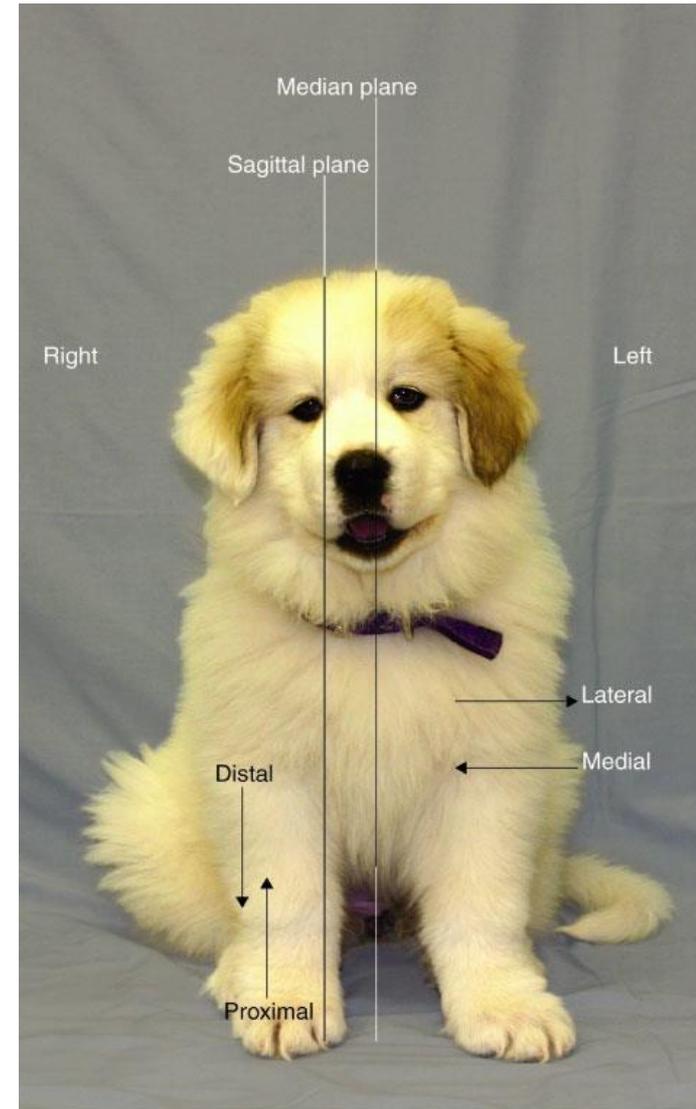
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# Directional Terms

- **Medial** and **lateral** refer to positions relative to the median plane
  - medial = toward the midline
  - lateral = away from the midline
- **Deep** and **Superficial** refer to the position of something relative to the center or surface of the body.
  - **deep** = toward the center of the body (internal)
  - **superficial** = toward the surface of the body or a body part (external).
- **Proximal** and **distal** describe positions only on extremities relative to other parts of the body.
  - **proximal** = toward the body
  - **distal** = away from the body



# **BODY CAVITIES**

- Cranial
- Thoracic
- Abdominal
- Pelvic

POSTERIOR ANTERIOR

Cranial cavity

Thoracic cavity

Pericardial cavity

Spinal cavity

Diaphragm

Abdominal cavity

Pelvic cavity

Abdominopelvic cavity

**FIGURE 1-13 Body Cavities.** (a) The dorsal body cavity is bounded by the bones of the skull and vertebral column. The muscular diaphragm divides the ventral body cavity into a superior thoracic (chest) cavity and an inferior abdominopelvic cavity. The pericardial cavity is located inside the chest cavity. (b) The heart is suspended within the pericardial cavity like a fist pushed into a balloon. The attachment site, corresponding to the wrist of the hand in the model, lies at the connection between the heart and major blood vessels.

Pericardial cavity

Heart

Visceral pericardium

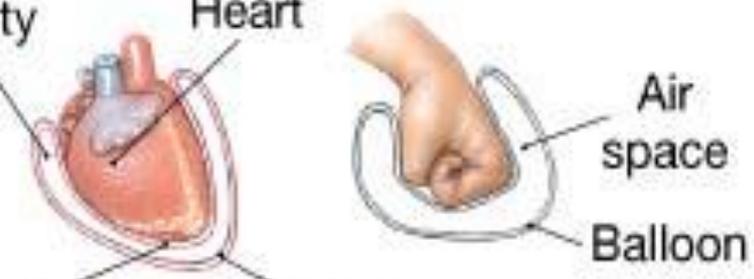
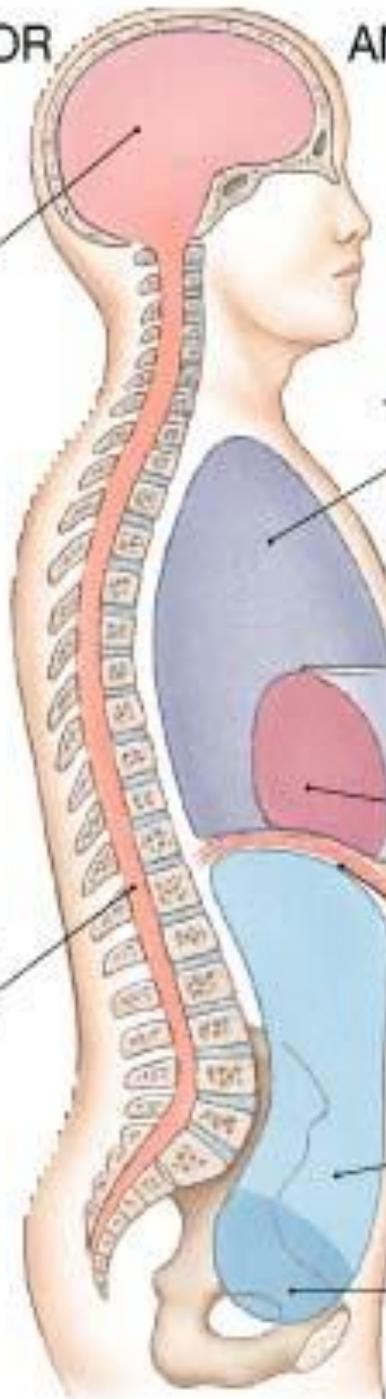
Parietal pericardium

Air space

Balloon

(b)

(a)



• **FIGURE 1-13 Body Cavities.** (c) Anterior and sectional views of the ventral body cavity, showing the central location of the pericardial cavity within the chest cavity. (d) The sectional plane shows how the mediastinum divides the thoracic cavity into two pleural cavities.

