

Anatomical terminology

Objective:

By the end of this lecture, student should understand :

- The terms used to precisely locate one part of the body relative to another

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

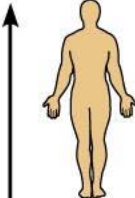
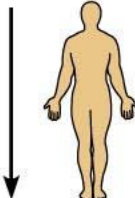
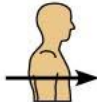
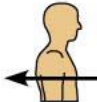
- ❖ Superior/Cephalic/Cranial
- ❖ Inferior/Caudal
- ❖ Anterior/Ventral
- ❖ Posterior/Dorsal
- ❖ Superficial(**External**) : toward surface
- ❖ Deep(**Internal**) : away from surface

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

TABLE

1.1 Orientation and Directional Terms

Term	Definition		Example
Superior (cranial)	Toward the head end or upper part of a structure or the body; above		The head is superior to the abdomen.
Inferior (caudal)	Away from the head end or toward the lower part of a structure or the body; below		
Anterior (ventral)*	Toward or at the front of the body; in front of		The breastbone is anterior to the spine.
Posterior (dorsal)*	Toward or at the back of the body; behind		The heart is posterior to the breastbone.

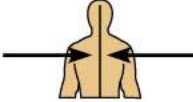
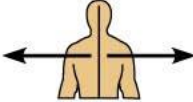
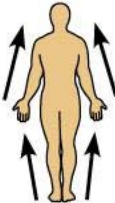

*Whereas the terms *ventral* and *anterior* are synonymous in humans, this is not the case in four-legged animals. *Ventral* specifically refers to the “belly” of a vertebrate animal and thus is the inferior surface of four-legged animals. Likewise,

although the dorsal and posterior surfaces are the same in humans, the term *dorsal* specifically refers to an animal’s back. Thus, the dorsal surface of four-legged animals is their superior surface.

TABLE

1.1

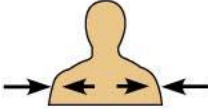
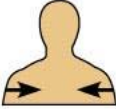


Orientation and Directional Terms

Term	Definition		Example
Medial	Toward or at the midline of the body; on the inner side of		The heart is medial to the arm.
Lateral	Away from the midline of the body; on the outer side of		The arms are lateral to the chest.
Proximal	Closer to the origin of the body part or the point of attachment of a limb to the body trunk		The elbow is proximal to the wrist.
Distal	Farther from the origin of a body part or the point of attachment of a limb to the body trunk		The knee is distal to the thigh.

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TABLE

1.1 Orientation and Directional Terms

Term	Definition		Example
Superficial (external)	Toward or at the body surface		The skin is superficial to the skeletal muscles.
Deep (internal)	Away from the body surface; more internal		
Ipsilateral	On the same side		The right hand and right foot are ipsilateral.
Contralateral	On opposite sides		

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Thank you