### **CONCEPT: BODY PLANES AND DIRECTIONS**

# **Body Planes**

- ◆ Imaginary \_\_\_\_\_ surfaces used to divide the body into \_\_ planes for anatomical reference and descriptions.
  - Person is always depicted in a standard anatomical position.
  - Standard Anatomical Position: Standing \_\_\_\_\_ with feet together, arms at sides and palms facing forward.

Standard Anatomical Position	Plane	Definition	Memory Tool
	Frontal	Divides into and	Frontal: Front to back.
	Sagittal	Divides into and and	Sagittal: Side to side.
	Transverse (Axial)	Divides into and and	Transverse: Top to bottom.

#### **EXAMPLE**

Which of the following pair of body parts are separated by the transverse plane?

- a) Brain and Spinal Cord
- b) Heart and Lungs
- c) Urinary Bladder and Cranium
- d) Left Kidney and Right Kidney

#### **PRACTICE**

Which body plane divides the body into the anterior and posterior portions? (**Hint:** Remember the meaning of the prefixes ante- and post-.)

a) Frontal

- b) Transverse
- c) Diagonal
- d) Sagittal

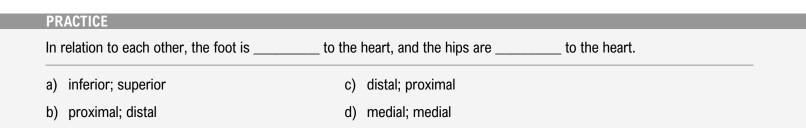
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# **Body Directions**

◆ These terms are used to accurately describe the location of body parts in relation to one another and the body's position.

Standard Anatomical Position	Direction	Definition	Memory Tool
	Superior	Towards the or above another body part.	Skull
Superior Inferior	Inferior	Towards the or below another body part.	Feet
Posterior	Posterior	the body.	
Anterior _	Anterior	the body.	<b>Ante</b> bellum
Medial  Lateral	Medial	Towards the of the body.	<b>Med</b> ium
	Lateral	Away from the midline of the body.	Later
Distal	Distal	away from a body part.	<b>Dist</b> ant
Frontal View	Proximal	towards a body part.	<b>Proximi</b> ty

EXAMPLE				
Which body part is inferior to the human mouth?				
a) Ears	b) Belly button	c) Eyes	d) Nose	



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#### **Body Positions**

- ◆ These terms are used to designate the \_\_\_\_\_ of the human body.
  - ▶ Primarily used in describing a patient's \_\_\_\_\_ during examinations and surgical procedures.

Anatomical Position	Definition	Memory Tool
Supine	Body lying face	sine = Face up
Prone	Body lying face	

#### **EXAMPLE**

Mr. Johnson is a 72-year-old patient who has been experiencing spinal instability and severe nerve compression resulting in continuous pain, weakness and numbness in his extremities. Physical therapy and various medications have proven to be unsuccessful. His surgeon recommends spinal fusion surgery. During the procedure what is the correct position for Mr. Johnson to have this surgery?

a) Prone

b) Supine

c) Seated

d) Distal

#### **PRACTICE**

Which of the following body planes divides the body into superior and inferior portions?

a) Oblique

b) Sagittal

- c) Transverse
- d) Frontal

#### PRACTICE

Which of the following statements is true when comparing two body parts?

- a) The diaphragm is inferior to the stomach.
- b) The thumb is proximal to the knee.
- c) The nose is posterior to the ears.
- d) The eyes are medial to the ears.