



Exercise 1: Anatomical Terms

Photo 1: Skeletal System Structure Position

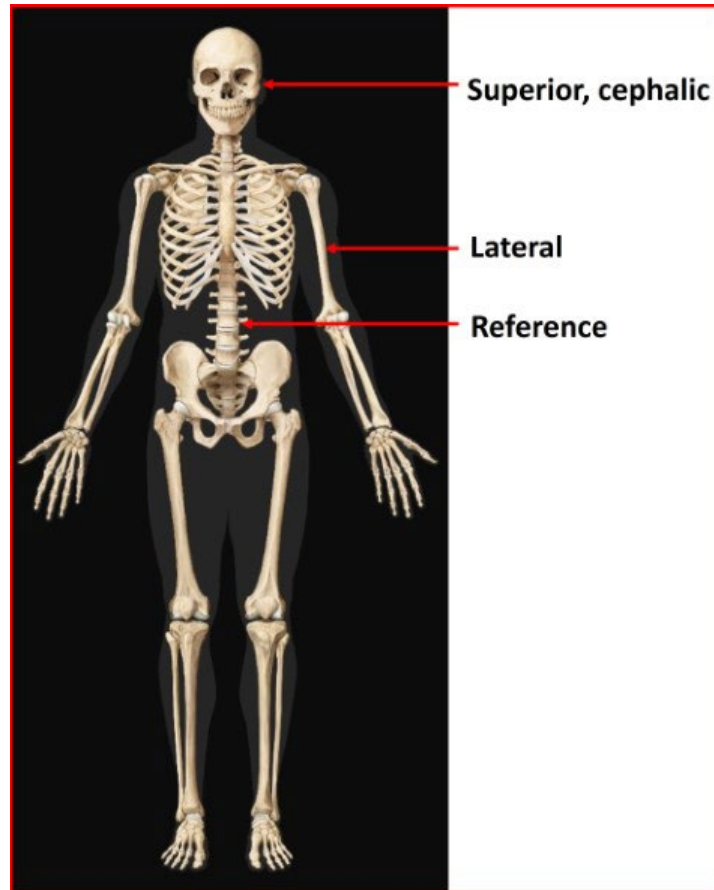


Table 1: Respiratory System Structure Position

Structure	Relative Position to Trachea
Larynx	Superior, Cephalic
Right Lung	Lateral
Left Lung	Lateral
Diaphragm	Inferior, Caudal

Question 1

Describe the overall position of the virtual model that was used in this exercise.

The virtual model represented anatomical position, the standard reference for all anatomical directions, descriptions, and locations. The virtual model is standing upright with feet shoulder width apart, flat on the ground, and parallel with toes pointing forward. The upper limbs are held out slightly to each side with palms facing forward and thumbs pointing outwards.

Question 2

How would have the results recorded in Photo 1 and Data Table 1 have differed if a lateral view of the virtual model was used for this exercise?

Using a lateral view of the virtual model would not have changed the results recorded in Photo 1 and Data Table 1 because all directional terms used to describe a body assume that the body is in anatomical position regardless of the actual position of the body.

Exercise 2: Anatomical Planes

Photo 2: Sagittal and Transverse Body Planes

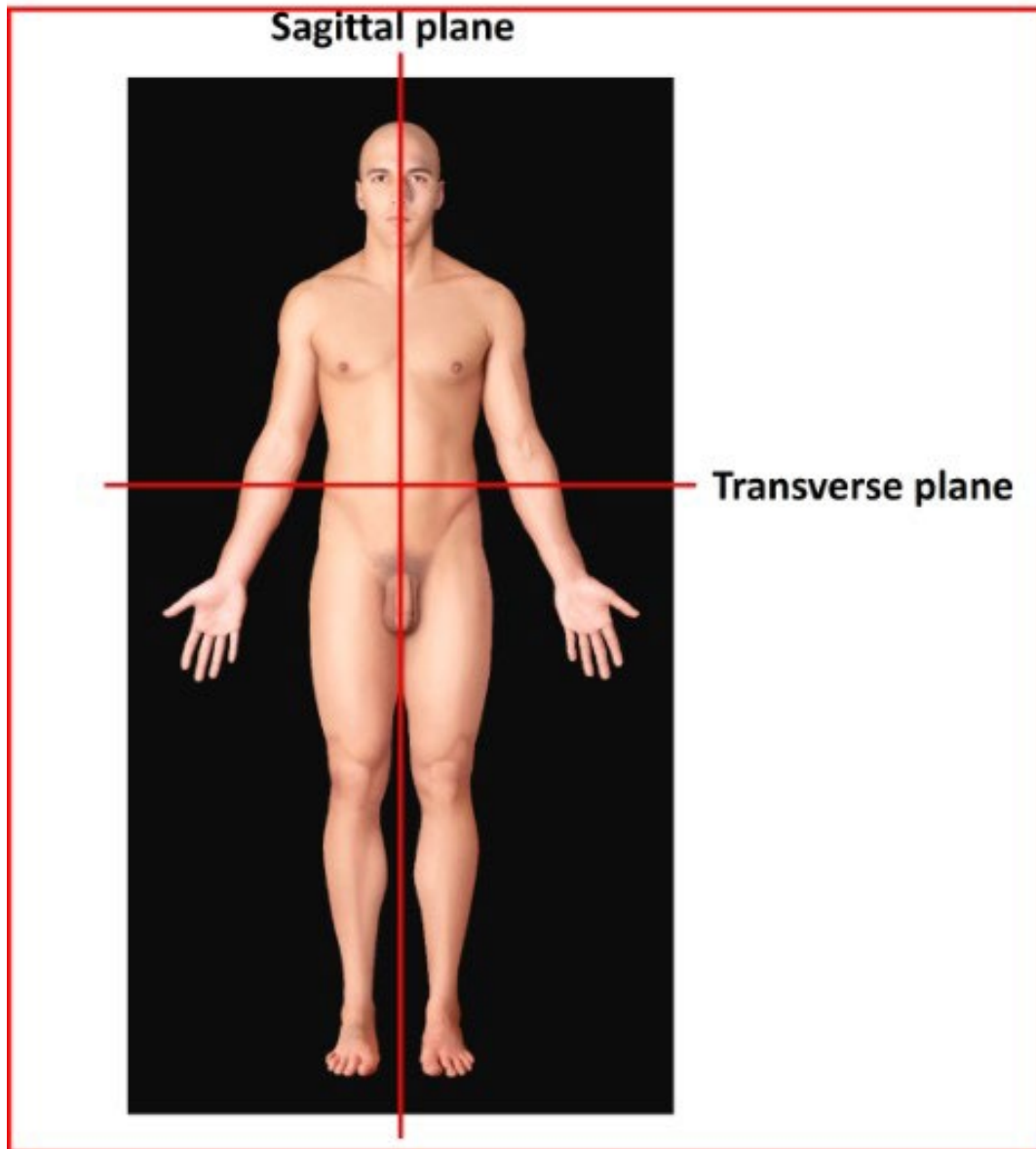


Photo 3: Coronal Muscular Model Plane

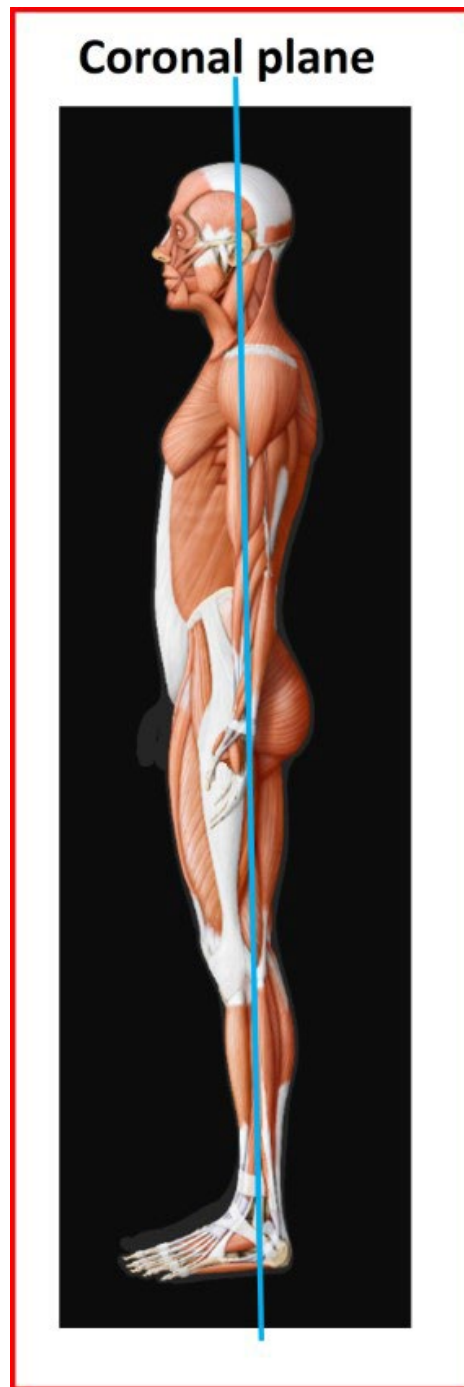


Table 2: Muscle Positions

Muscle	Relative position to coronal plane line
Greater Pectoral	Ventral
Latissimus Dorsi	Dorsal
Vastus Lateralis	Ventral

Question 1

Which body plane line should be used to isolate the structures of the respiratory system that were viewed in Exercise 1? Explain your answer by referencing the body plane lines displayed in Photos 2 and 3.

The transverse body plane line displayed in Photo 2 should be used to isolate the structures of the respiratory system because the transverse line divides the body into upper and lower halves and because the respiratory structures reside in the upper half of the body.

Exercise 3: Body Cavities

Photo 4: Thoracic Cavity

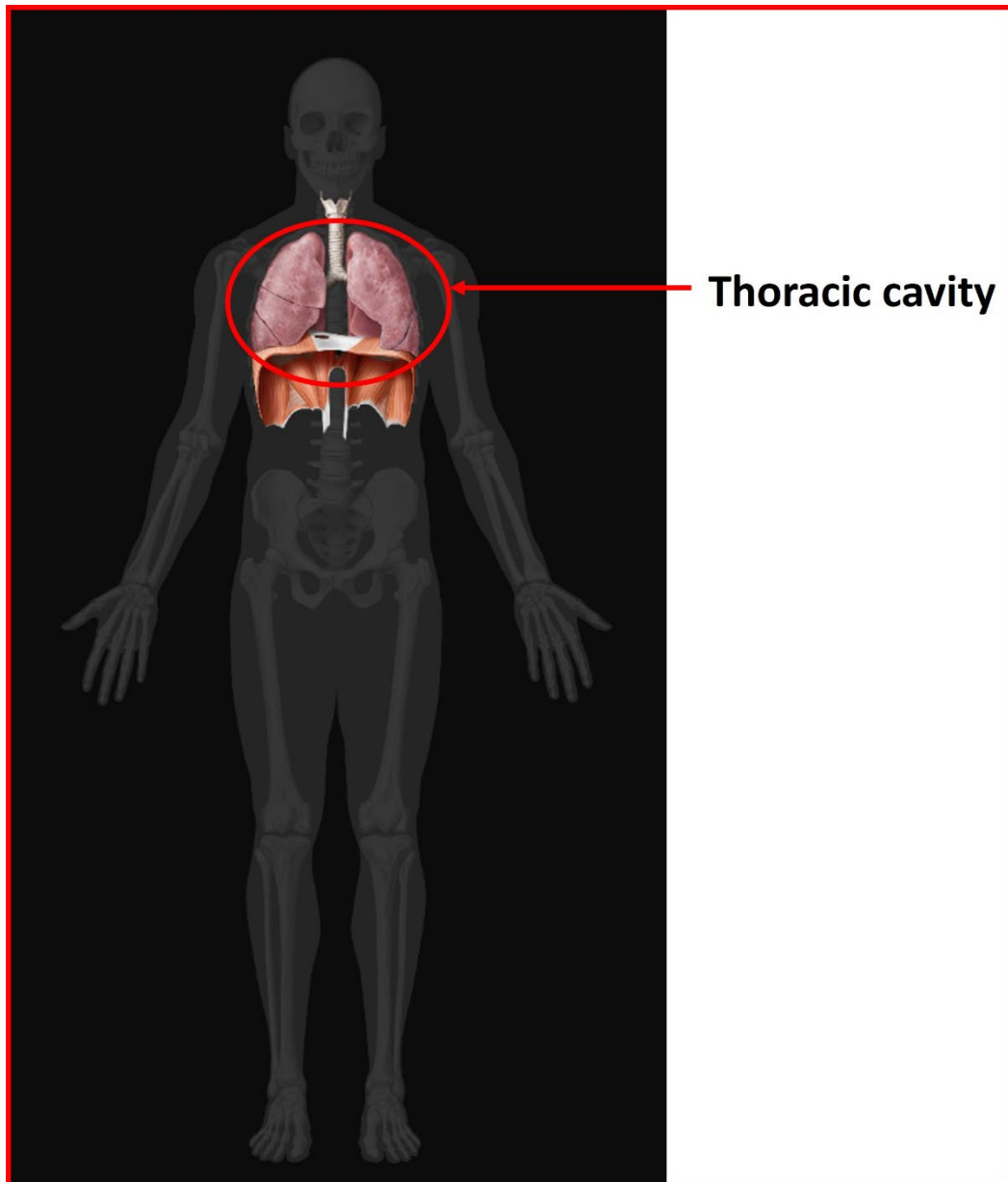
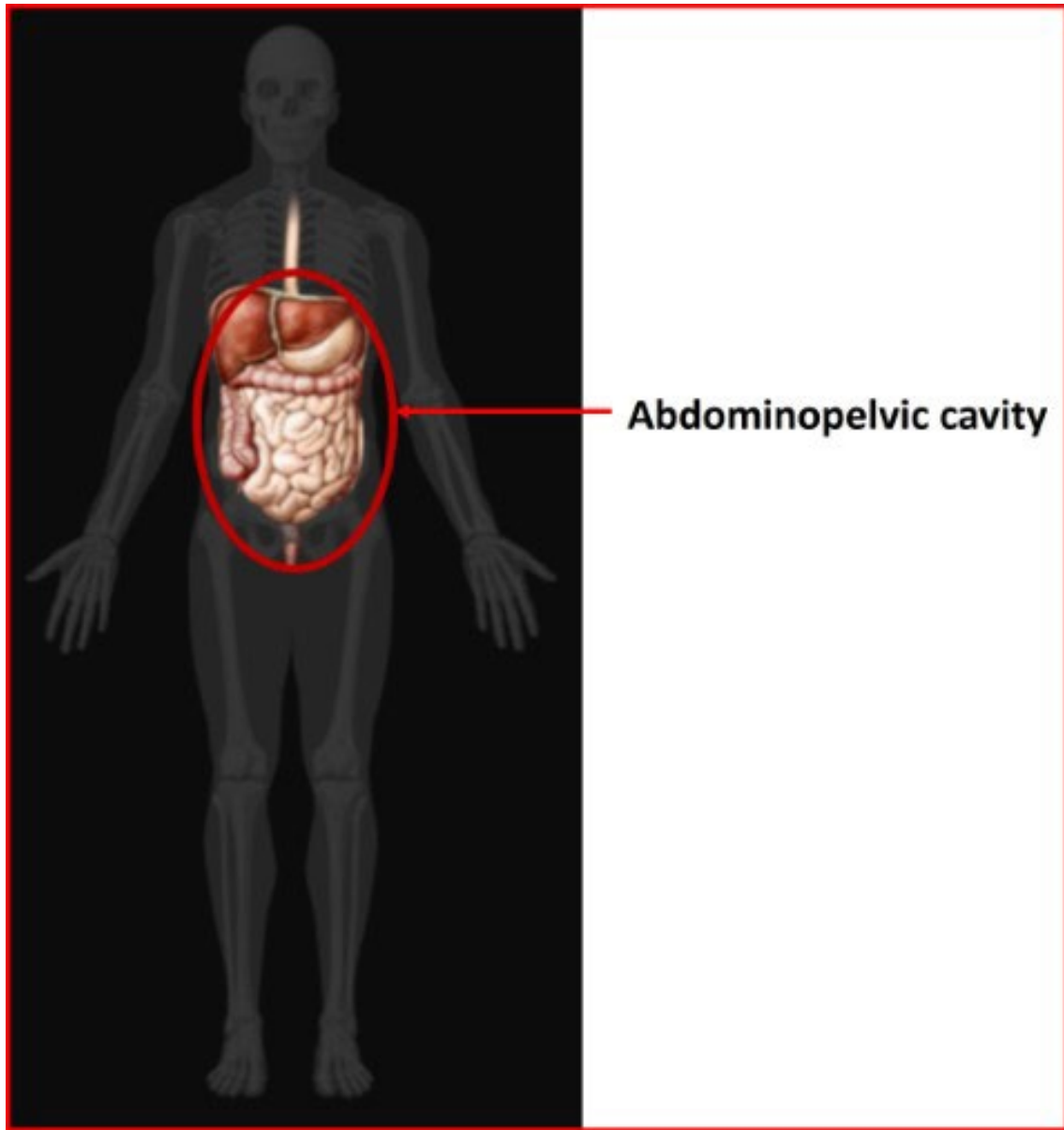


Photo 5: Abdominopelvic Cavity



Question 1

Describe the boundaries of and structures contained within the thoracic cavity.

The thoracic cavity is bounded laterally by the ribs and caudally by the diaphragm. The thoracic cavity contains the heart, lungs, trachea, esophagus, major blood vessels and nerves.

Extension Question

A medical resident performing a shift in the ER is provided with a report of an inbound trauma patient with a right lung residing in the abdominopelvic cavity. Apply your knowledge of body cavities and anatomical terminology to describe the movement of the lung during the accident.

The lung has migrated caudally from the thoracic cavity (specifically the pleural cavity) where it normally resides through the diaphragm and into the abdominopelvic cavity.