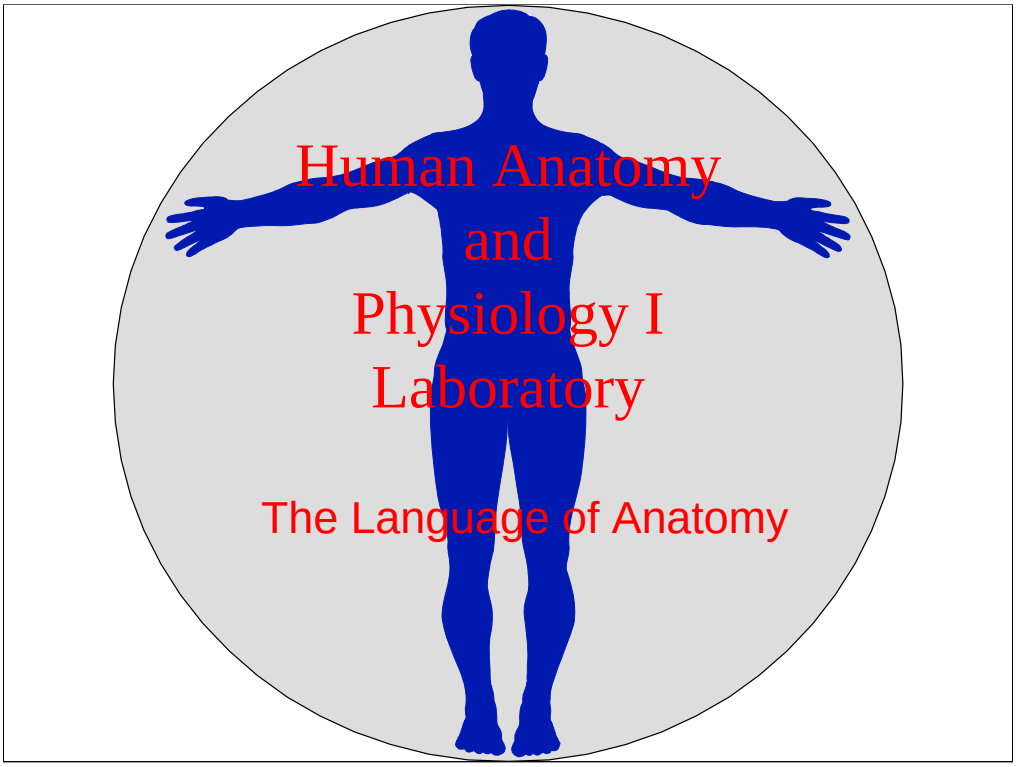
Mpeg 4 for iPod

mp3



The Human Anatomy and Physiology online labs involve study of the appropriate laboratory exercise, completing the Review Sheet for the exercise, and taking the relevant quiz. Click on the sound icon for the audio file (mp3 format) for each slide. There is also a link to a dowloadable mp4 video which can be played on an iPod.

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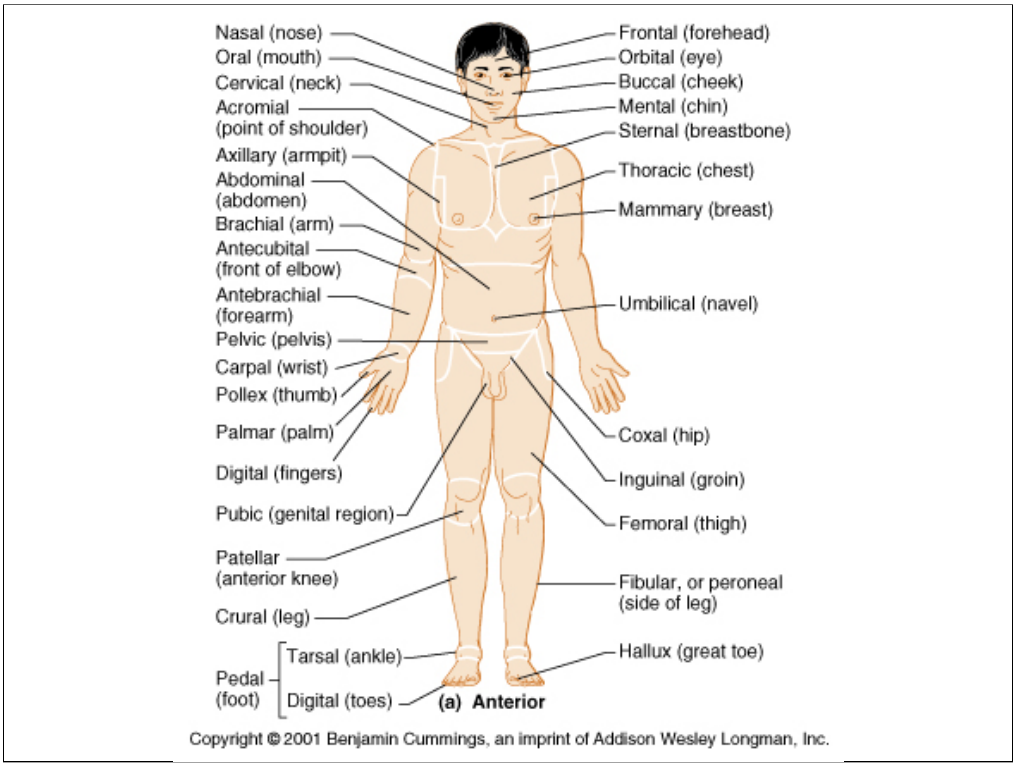

Here are the terms for the various anatomical regions as seen anteriorly. Note the short list of the most important terms in slide 4.

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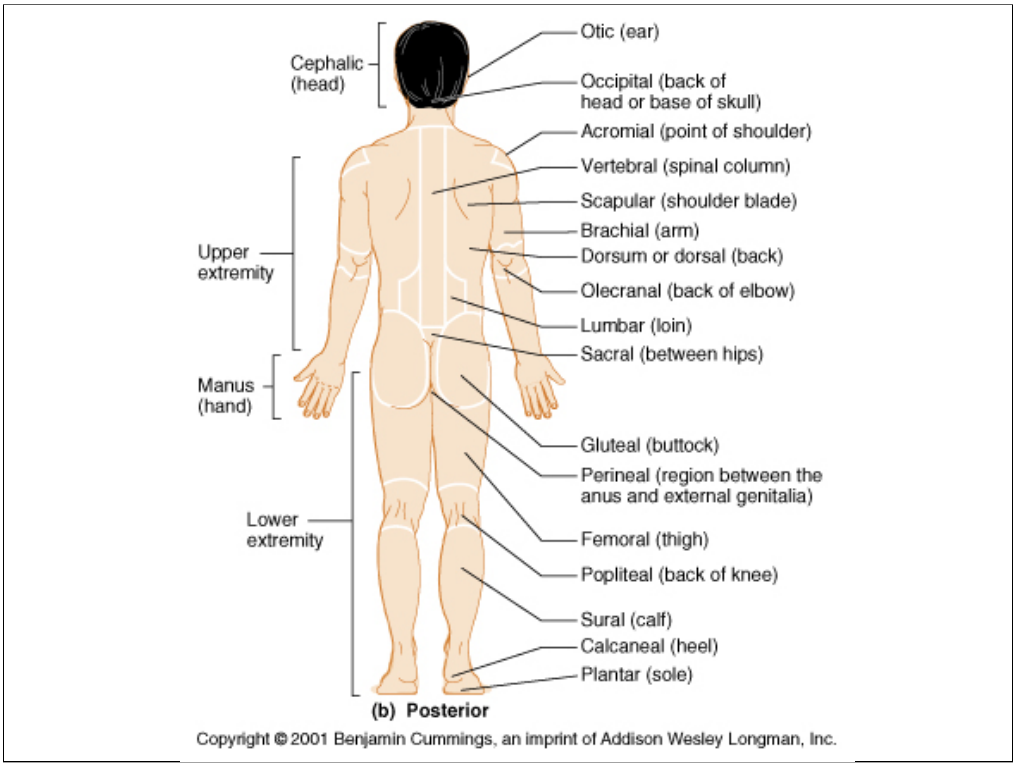

Here are the terms for the various anatomical regions as seen posteriorly. Note the short list of the most important terms in slide 4.

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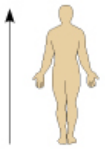
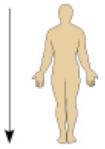
Important Anatomical Terms

Antebrachial: Pertaining to the forearm
Antecubital: Pertaining to the anterior surface of the elbow
Axillary: Pertaining to the armpit
Brachial: Pertaining to the arm
Buccal: Pertaining to the cheek
Carpal: Pertaining to the wrist
Cervical: Pertaining to the neck region
Coxal: Pertaining to the hip
Crural: Pertaining to the leg
Digital: Pertaining to the fingers or toes
Femoral: Pertaining to the thigh
Fibular (peroneal): Pertaining to the side of the leg
Frontal: Pertaining to the forehead
Hallux: Pertaining to the great toe
Inguinal: Pertaining to the groin
Mammary: Pertaining to the breast
Mental: Pertaining to the chin
Nasal: Pertaining to the nose
Oral: Pertaining to the mouth
Orbital: Pertaining to the bony eye socket (orbit)
Palmar: Pertaining to the palm of the hand
Patellar: Pertaining to the anterior knee (kneecap) region
Pedal: Pertaining to the foot
Pelvic: Pertaining to the pelvis region
Pollex: Pertaining to the thumb
Pubic: Pertaining to the genital region
Sternal: Pertaining to the region of the breastbone
Tarsal: Pertaining to the ankle
Thoracic: Pertaining to the chest
Umbilical: Pertaining to the navel

The cephalocaudal runs from head to tail.

Cephalo or cephalic

TABLE 1.1 Orientation and Directional Terms

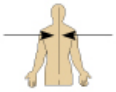
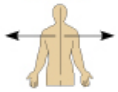
Term	*Definition*	*Example*	
Superior (cranial)	Toward the head end or upper part of a structure or the body; above		The head is superior to the abdomen
Inferior (caudal)	Away from the head end or toward the lower part of a structure or the body; below		The navel is inferior to the chin
Anterior (ventral)*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

*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.

Note that the directional terms **superior**, **inferior**, **anterior** and **posterior** are useful for humans only, since these surfaces are different in quadrupeds. The terms **cephalic**, **caudal**, **ventral**, and **dorsal** are preferable because they can be used universally.

The dorsoventral or anteroposterior axis runs from from to back.

TABLE 1.1 Orientation and Directional Terms

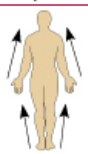
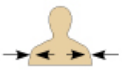
Term	*Definition*	*Example*	
Posterior (dorsal)*	Toward or at the back of the body; behind		The heart is posterior to the breastbone
Medial	Toward or at the midline of the body; on the inner side of		The heart is medial to the arm
Lateral	Away from the midline of the body; on the outer side of		The arms are lateral to the chest
Intermediate	Between a more medial and a more lateral structure		The collarbone is intermediate between the breastbone and shoulder

*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.

The third axis is not described by any of these terms, it is simply the right-left axis which runs from side to side.

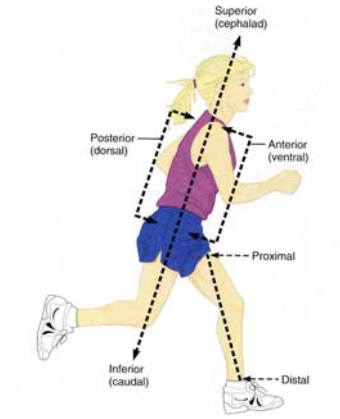
Note that the directional terms **superior**, **inferior**, **anterior** and **posterior** are useful for humans only, since these surfaces are different in quadrupeds. The terms **cephalic**, **caudal**, **ventral**, and **dorsal** are preferable because they can be used universally. **Medial**, **lateral**, and **intermediate** can also apply universally.

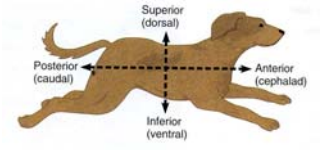
TABLE 1.1 Orientation and Directional Terms

Term	*Definition*	*Example*	
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
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		The lungs are deep to the skin

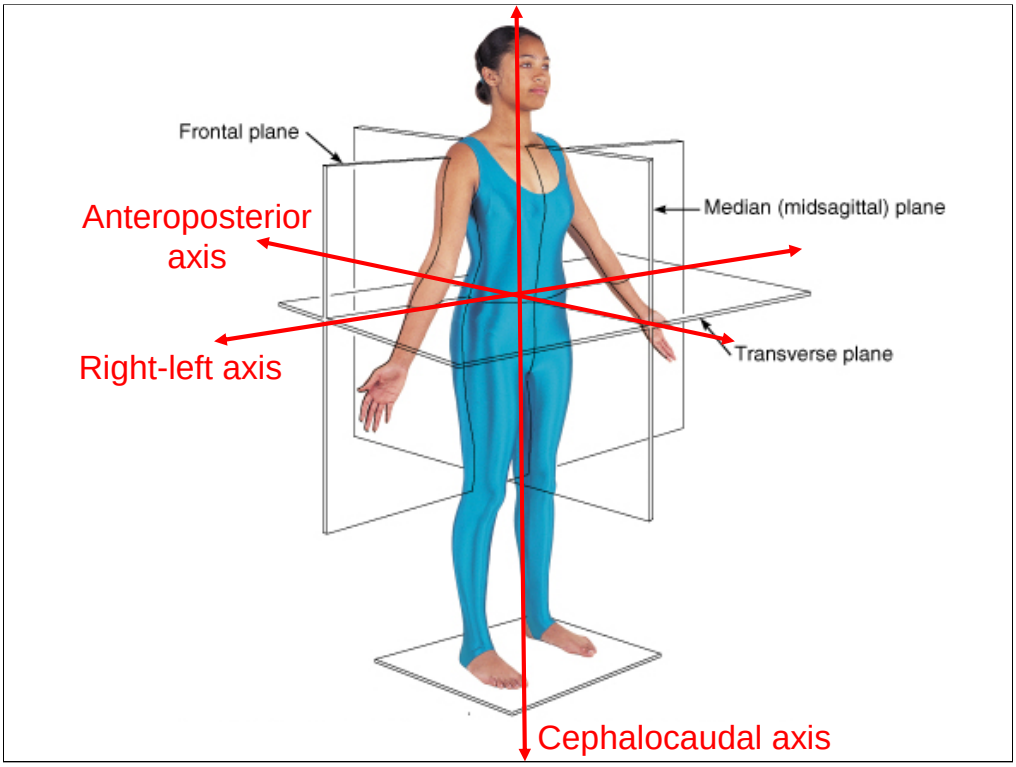
*Whereas the terms *ventral* and *anterior* are synonymous in humans, this is not the case in four-legged animals. *Ventral* specifically refers to the "belly" of a vertebrate animal and thus is the inferior surface of four-legged animals. Likewise, although the dorsal and posterior surfaces are the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

Axes and Directional Terms

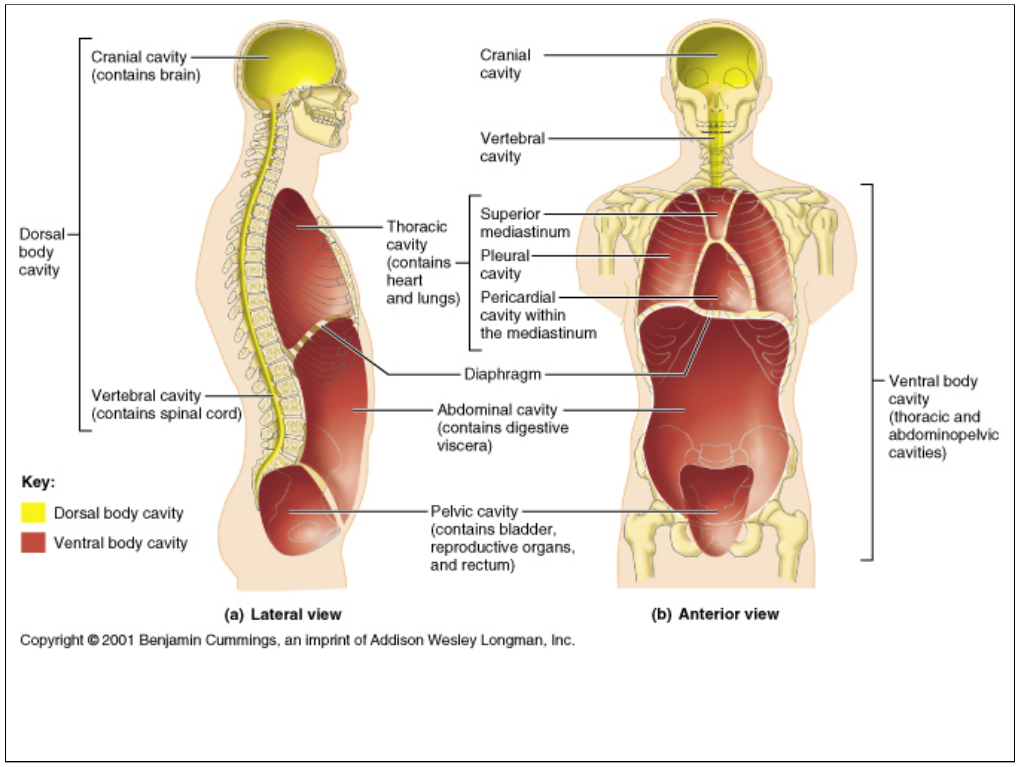




An organism has three axes: the cephalocaudal axis, the anteroposterior axis, and the right-left axis. The directional terms represent the two ends of each axis. Note that the directional terms **superior**, **inferior**, **anterior** and **posterior** are useful for humans only, since these surfaces are different in quadrupeds. The terms **cephalic**, **caudal**, **ventral**, and **dorsal** are preferable because they can be used universally.



The three basic planes: Each plane is formed by two axes. The **cephalocaudal axis** and the **right-left axis** produces the **frontal (coronal) plane**. The **cephalocaudal** and **anteroposterior** axes produce the **median (midsagittal) plane**. The **anteroposterior** and **right-left axes** produce the **transverse (horizontal) plane**. Each plane also describes a section taken of an organism or of an organ within the organism. Understanding these sections enables understanding of images and slides used to describe the body and its parts.



Here you see the cavities which protect organs. The only complete bony cavity is the **cranial cavity** which contains the brain. The **vertebral cavity** contains the spinal cord, the **thoracic cavity** contains the lungs, heart, and the large vessels. These cavities are partially protected by bone. The **abdominal and pelvic cavities** (often considered together as the **abdominopelvic cavity**) are soft cavities with no bony protection.

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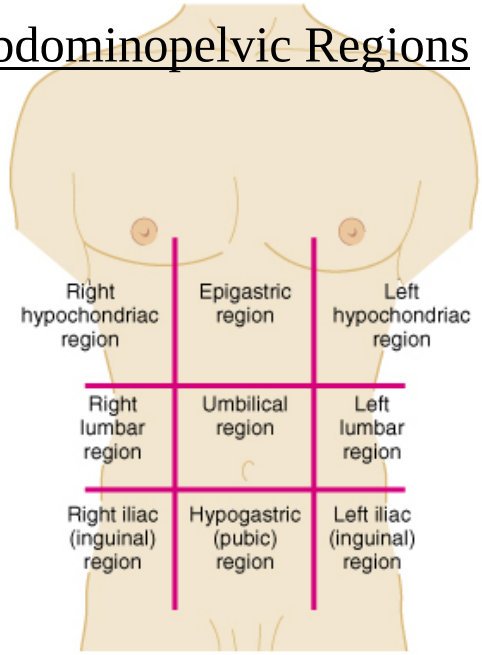
Abdominopelvic Regions



Here you see one method of designating areas of the abdominopelvic cavity.

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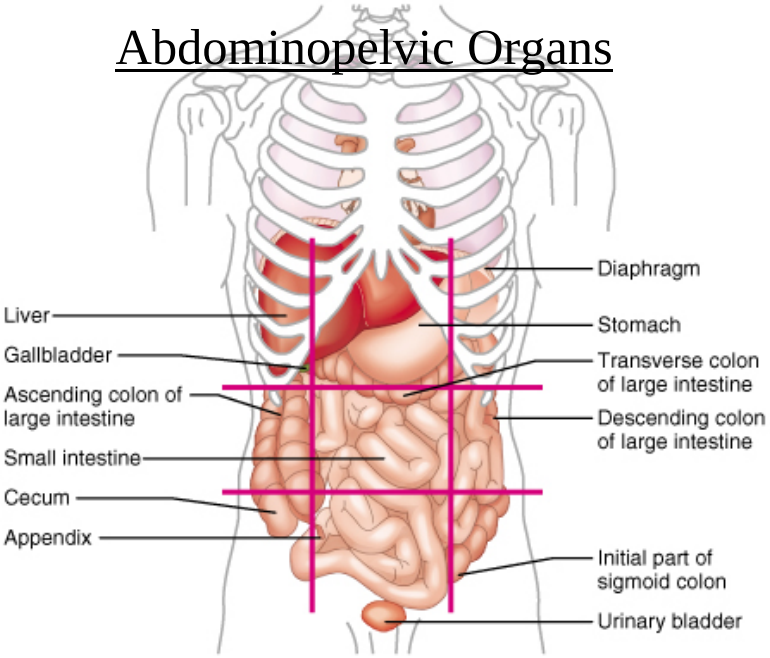
Abdominopelvic Organs



Here you see another method of designating areas of the abdominopelvic cavity along with the approximate location of the internal organs.

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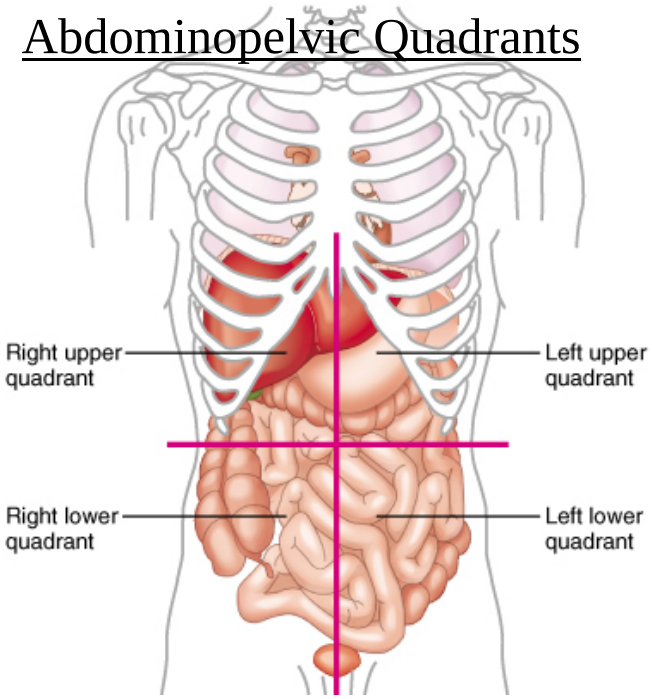
Abdominopelvic Quadrants



Here you see yet another method of designating areas of the abdominopelvic cavity along with the approximate location of the internal organs.

Lab Protocol

1) Study and identify directional terms, planes, sections, body cavities, and surfaces indicated in Lab Syllabus for “The Language of Anatomy."

2) Complete and submit the Review Sheet for “The Language of Anatomy” from the lab manual.

3) Take the Online Quiz for “The Language of Anatomy”.