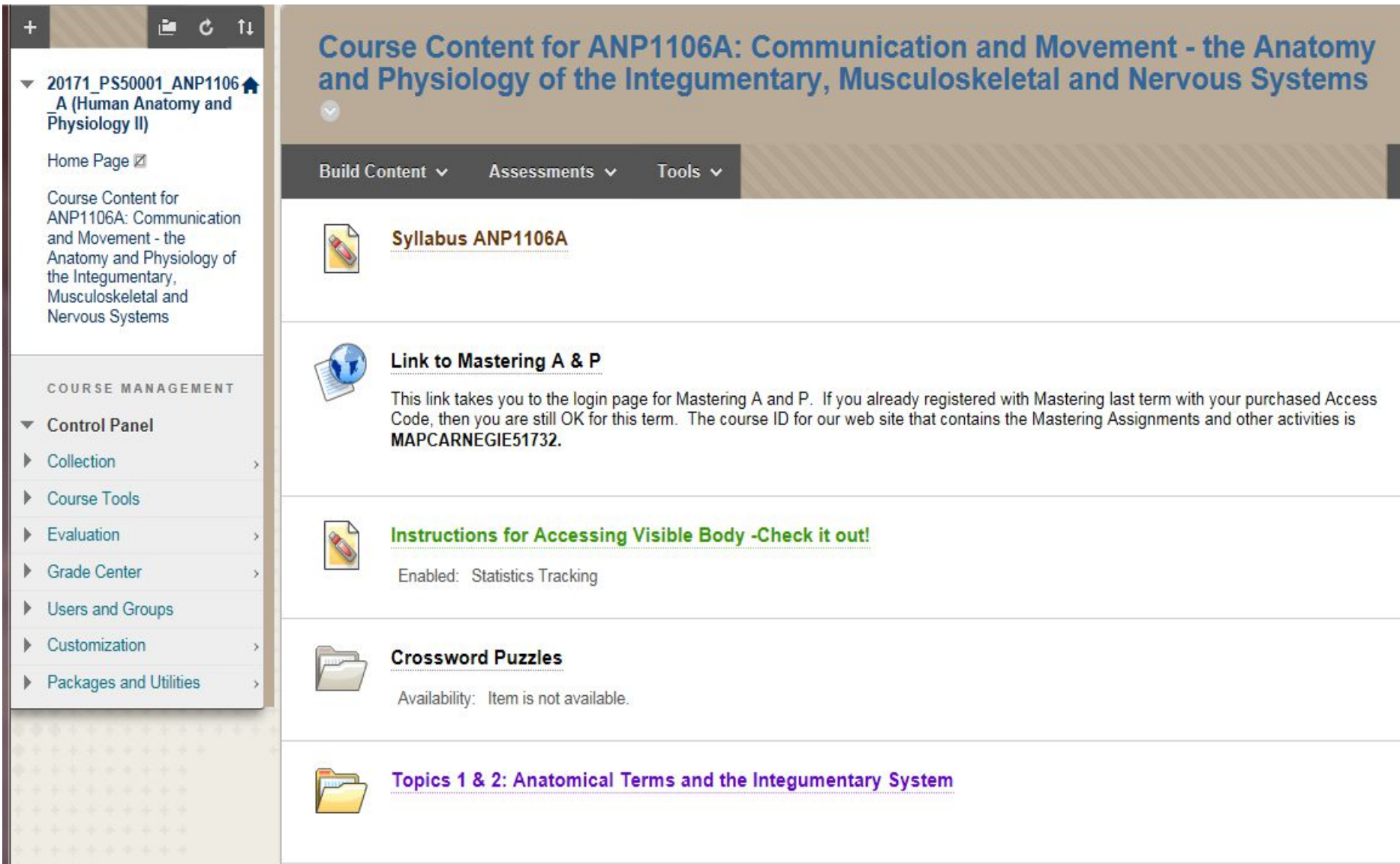


# ANP 1106 (sections A, C)

(Winter, 2017)

1. Anatomical Terms
2. Integumentary System
3. Anatomy of the Skeletal System
4. Anatomy and Physiology of the Joints
5. Anatomy of the Muscular System
6. Anatomy of the Nervous System
7. Physiology of the Nervous System

# Course Web Site



The screenshot shows a course web site interface. On the left is a navigation sidebar with a search bar and a list of course management options. The main content area features a title bar for the course, followed by a menu with 'Build Content', 'Assessments', and 'Tools'. Below this are five content items, each with an icon and a title:

- Syllabus ANP1106A** (Pencil icon)
- Link to Mastering A & P** (Globe icon)
- Instructions for Accessing Visible Body -Check it out!** (Pencil icon)
- Crossword Puzzles** (Folder icon)
- Topics 1 & 2: Anatomical Terms and the Integumentary System** (Folder icon)

The 'Link to Mastering A & P' item includes a descriptive paragraph: "This link takes you to the login page for Mastering A and P. If you already registered with Mastering last term with your purchased Access Code, then you are still OK for this term. The course ID for our web site that contains the Mastering Assignments and other activities is MAPCARNEGIE51732."

The 'Crossword Puzzles' item includes a note: "Availability: Item is not available."

## Course Content for ANP1106A: Communication and Movement - the Anatomy and Physiology of the Integumentary, Musculoskeletal and Nervous Systems

Build Content ▾ Assessments ▾ Tools ▾



### Syllabus ANP1106A



### Link to Mastering A & P

This link takes you to the login page for Mastering A and P. If you already registered with Mastering last term with your purchased Access Code, then you are still OK for this term. The course ID for our web site that contains the Mastering Assignments and other activities is MAPCARNEGIE51732.



### Instructions for Accessing Visible Body -Check it out!

Enabled: Statistics Tracking



### Crossword Puzzles

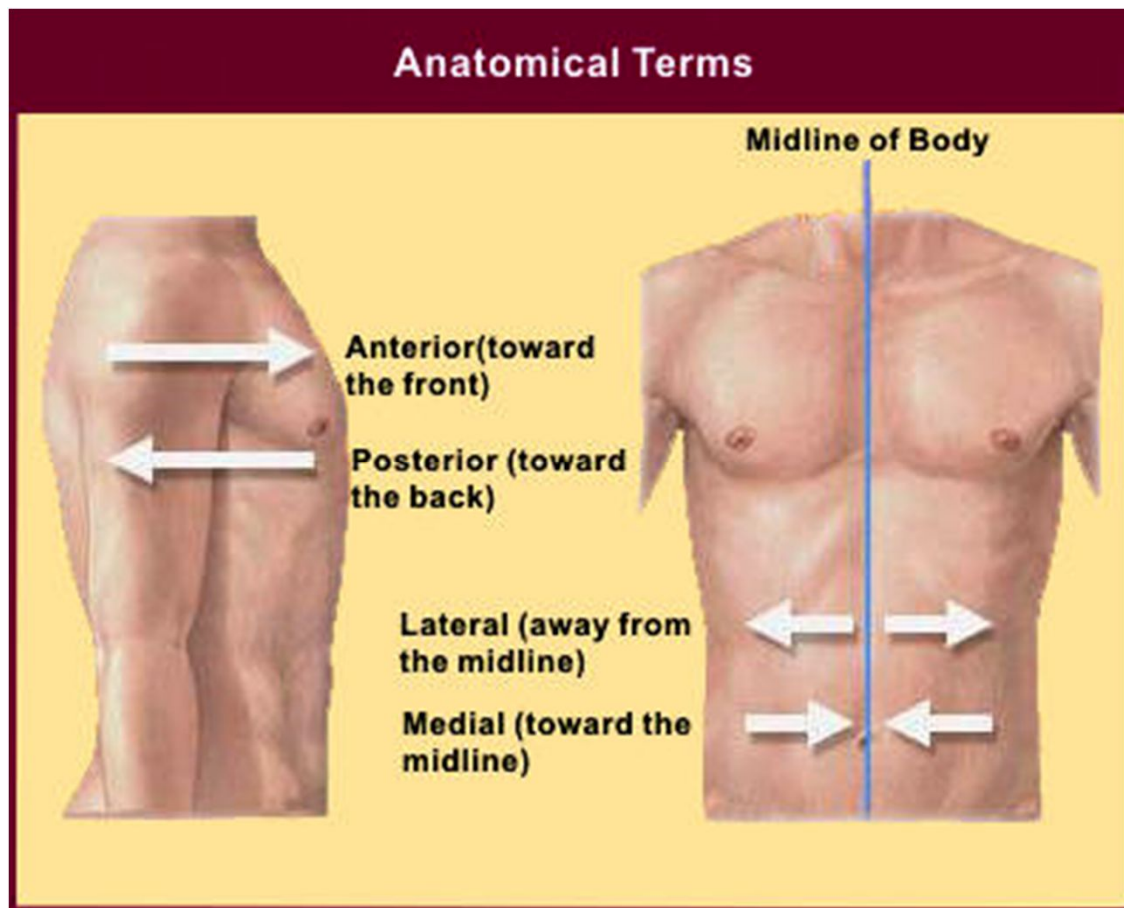
Availability: Item is not available.



### Topics 1 & 2: Anatomical Terms and the Integumentary System

# TOPIC #1: ANATOMICAL TERMS

## 1.1 Become familiar with anatomical nomenclature (pp. 11-20)



## 1.1. Describe the anatomical position, the regional and the directional terms as well as planes and sections

### The Anatomical Position of the Human Body (see Table 1.1)

to describe body parts/positions precisely & with as few words as possible:

- an initial reference point = body in **standard anatomical position**
- an indication of direction - remember that “**right**” and “**left**” refer to the patient or the cadaver, **not** the observer

**The anatomical position is very simple: body erect, feet slightly apart, and palms face forward with thumbs pointing away from body.**

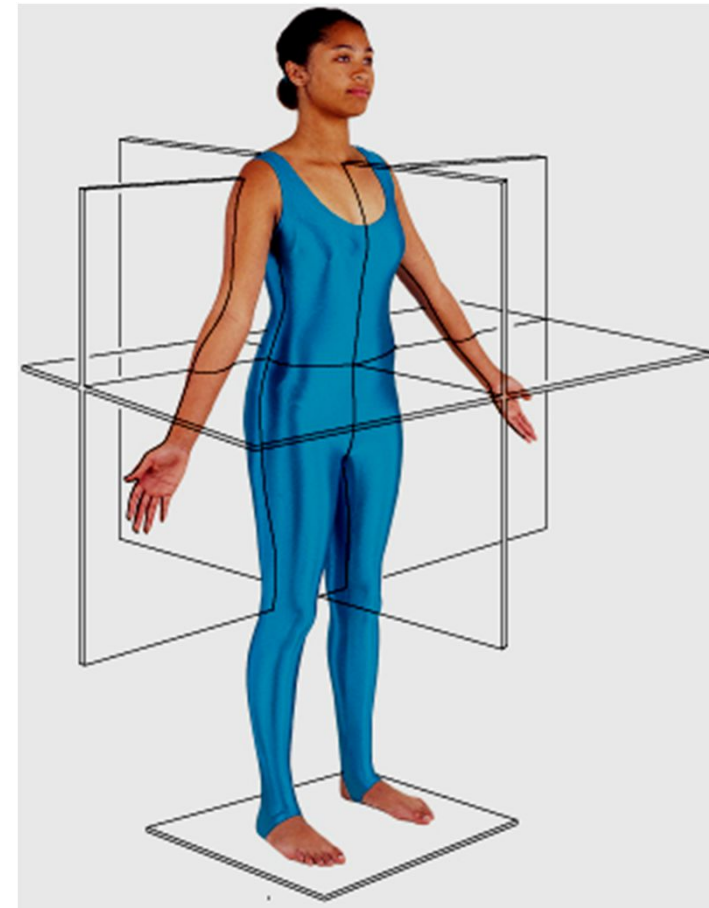


Fig. 1.8 (9<sup>th</sup> edition)

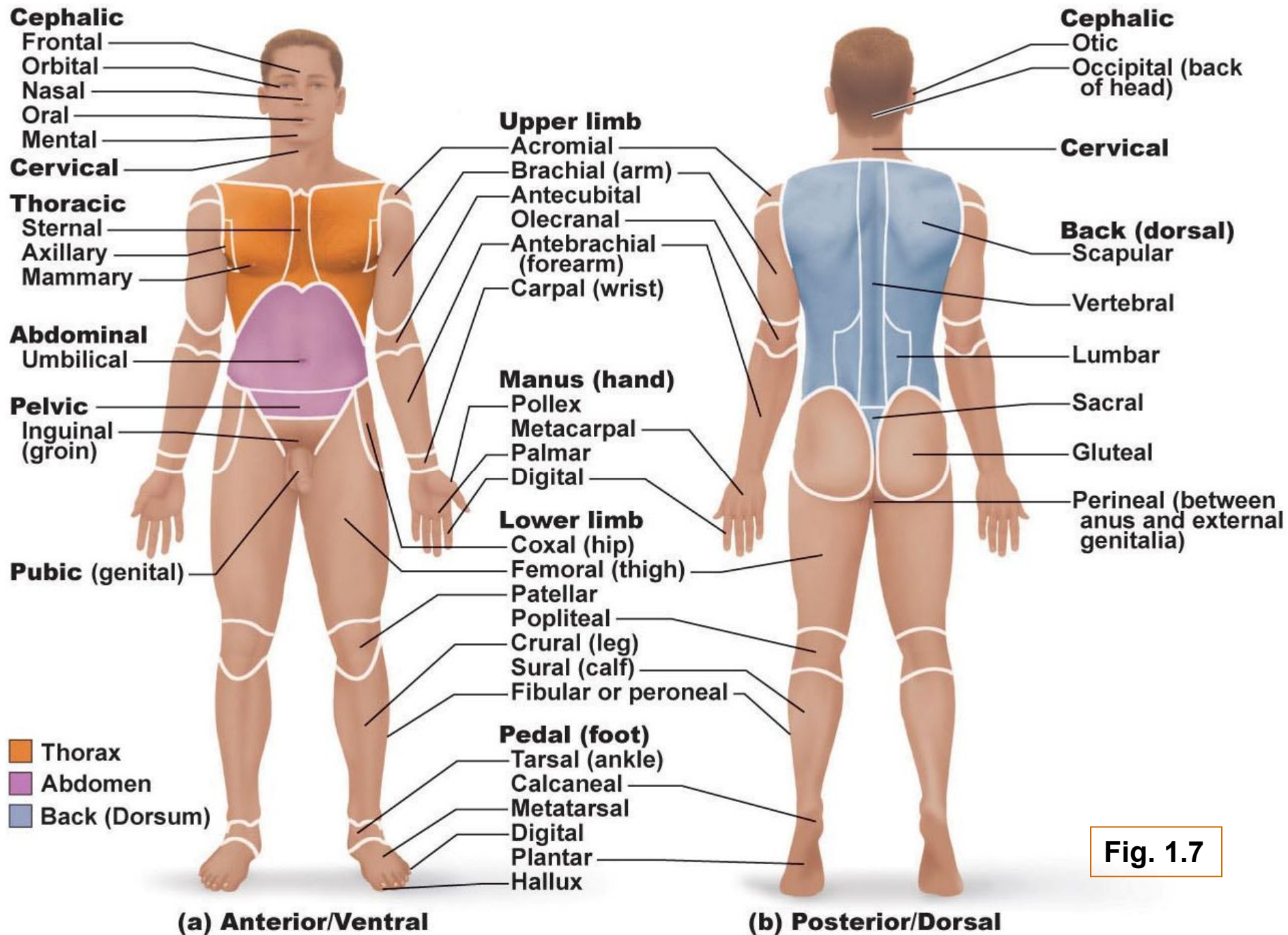
## Regional Terms:

2 fundamental divisions of body:

1. **axial part:** = head, neck & trunk
2. **appendicular part:** = appendages or limbs attached to axis

then **regional terms** (see fig. 1.7) used to designate specific areas within the axial or appendicular part of the body





**Fig. 1.7**

## Body Planes & Sections

3 common body planes - 2 are **vertical** & 1 is **horizontal**

- 1) **sagittal plane:** vertical plane that divides body into **right** & **left** parts

*Why not right and left **halves**? What is a **midsagittal** or **median** plane? What is a **parasagittal** plane?*

- 2) **frontal plane:** vertical plane that divides the body into **anterior** and **posterior** parts; also called a **coronal** plane

- 3) **transverse or horizontal plane:** from right to left dividing the body into **superior** and **inferior** parts  
transverse section = cross-section

*What is an **oblique** section??*

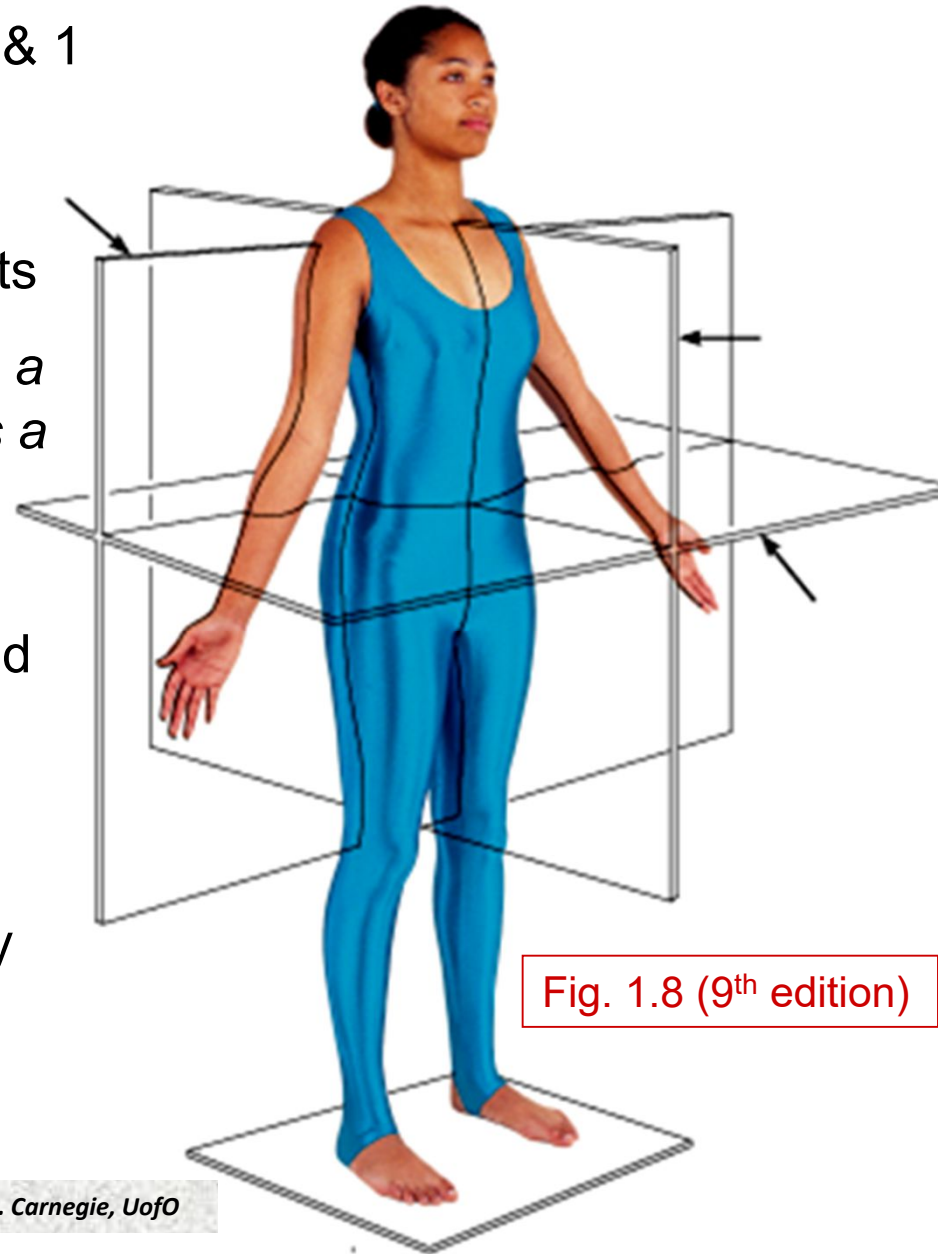


Fig. 1.8 (9<sup>th</sup> edition)

TERM	DEFINITION	EXAMPLE
<b>Superior</b> (cranial)	Toward the head end or <b>upper</b> part of a structure or the body; <b>above</b>	The head is <b>superior</b> to the abdomen.
<b>Inferior</b> (caudal)	Away from the head end or toward the <b>lower</b> part of a structure or the body; <b>below</b>	The navel is <b>inferior</b> to the chin.
<b>Anterior</b> (ventral)	Toward or at the <b>front</b> end of the body; <b>in front of</b>	The breastbone is <b>anterior</b> to the spine.
<b>Posterior</b> (dorsal)	Toward or at the <b>back</b> of the body; <b>behind</b>	The heart is <b>posterior</b> to the breastbone.
<b>Medial</b>	<b>Toward</b> or at the <b>midline</b> of the body; on the <b>inner side</b> of	The heart is <b>medial</b> to the arm.
<b>Lateral</b>	<b>Away from</b> the <b>midline</b> of the body; on the <b>outer side</b> of	The arms are <b>lateral</b> to the chest.
<b>Intermediate</b>	<b>Between</b> a more medial and a more lateral structure.	The collarbone is <b>intermediate</b> between the breastbone and shoulder.
<b>Proximal</b>	<b>Closer to</b> the origin of the body part of the point of attachment	The elbow is <b>proximal</b> to the wrist.
<b>Distal</b>	<b>Farther from</b> the origin of the body part or the point of attachment	The knee is <b>distal</b> to the thigh.
<b>Superficial</b>	<b>Toward</b> or at the body <b>surface</b> .	The skin is <b>superficial</b> to the skeletal muscles.
<b>Deep</b>	<b>Away from</b> the body surface; more internal	The lungs are <b>deep</b> to the skin.

## 1.2 Describe the body cavities

### 1. Dorsal body cavity:

**cranial cavity:** enclosed by **the skull** and houses the **brain**.

**vertebral (spinal) cavity:** enclosed by **the vertebral column** and houses the **spinal cord**.

Both cavities are continuous and well-protected, to protect nervous tissue and spinal cord.

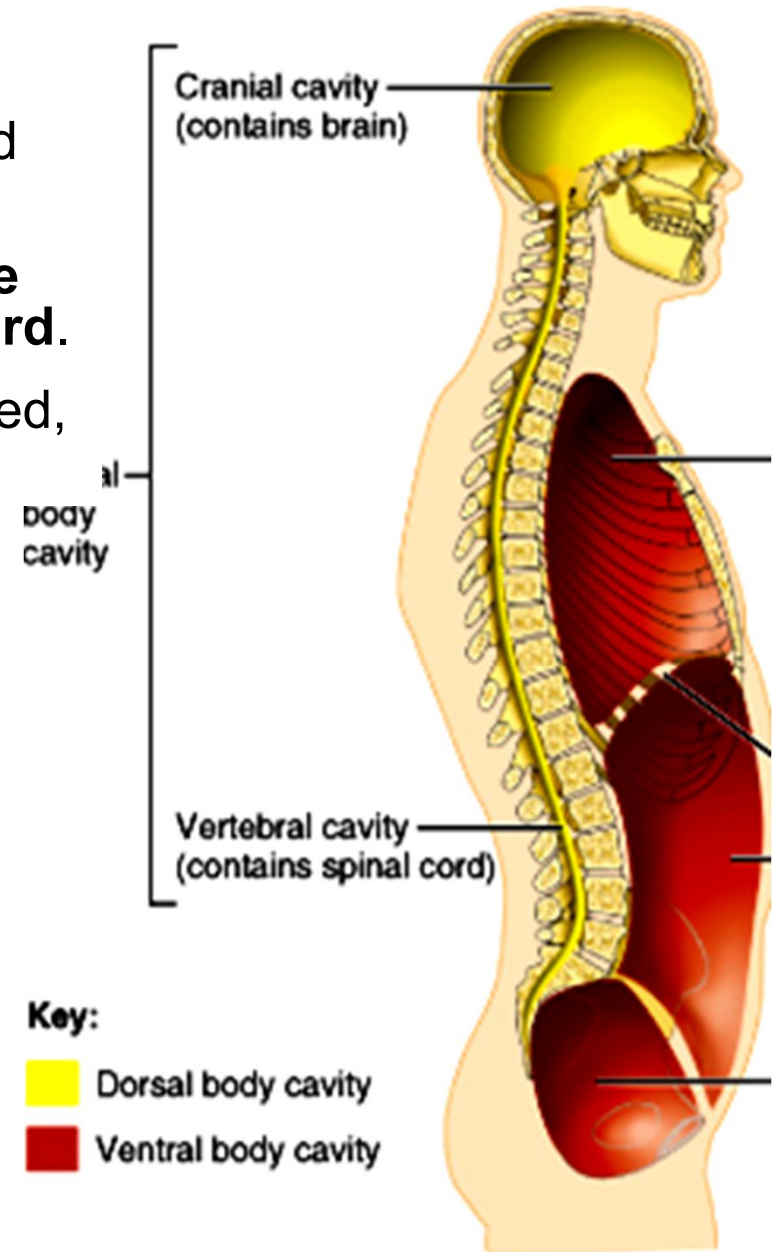


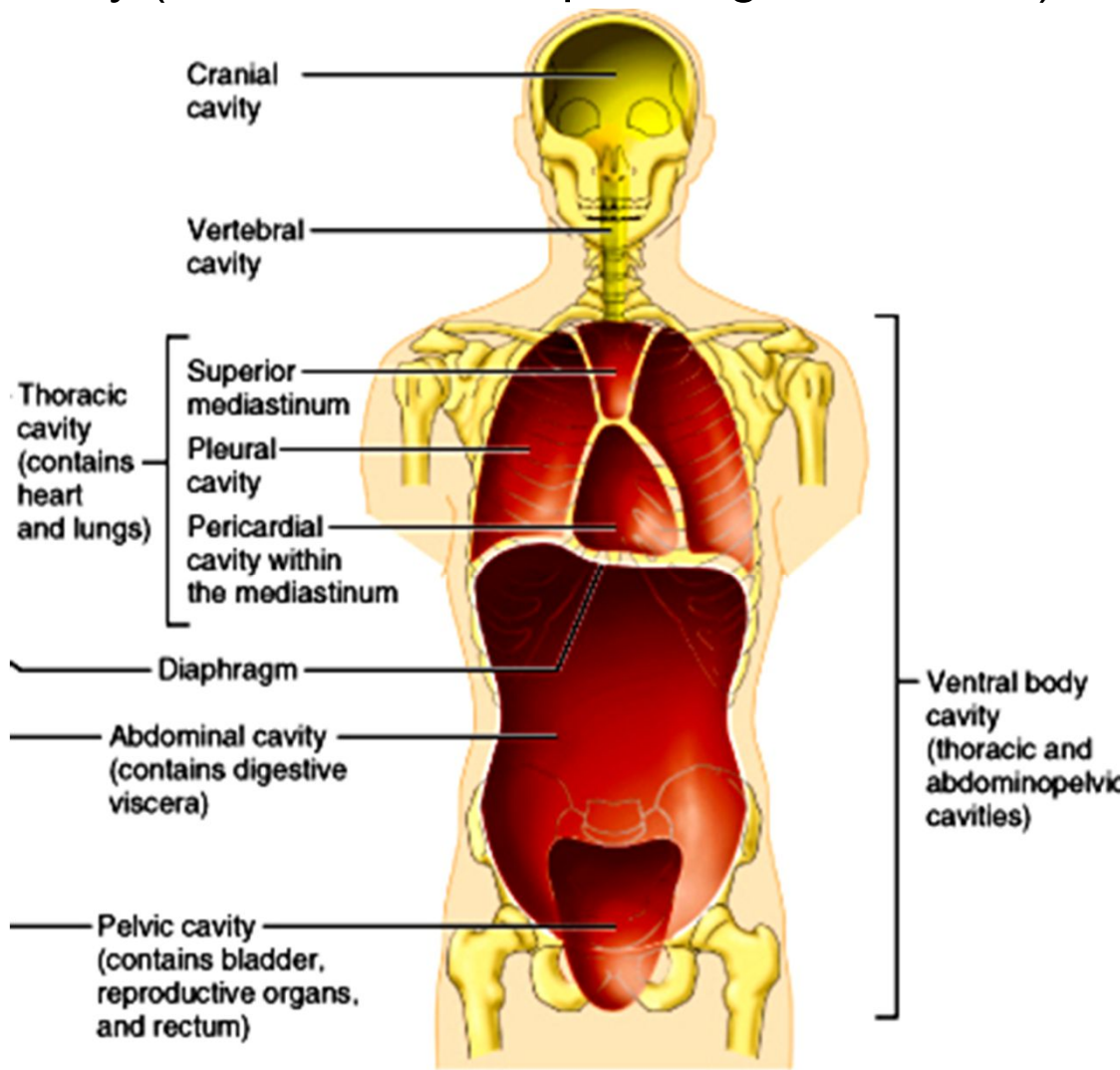
Fig. 1.9

2. Ventral body cavity:

larger; houses the viscera

**thoracic cavity:** 2 lateral **pleural** cavities + central **pericardial** cavity

**abdominopelvic cavity:** superior **abdominal** cavity (stomach, intestines, spleen, liver) & inferior **pelvic** cavity (bladder, some reprod organs, rectum)



(b) Anterior view

Fig. 1.9

*What structure separates the thoracic and abdominopelvic cavities?? The abdominal and pelvic cavities??*

*In which body cavity do the organs receive the least protection from physical trauma??*

# Abdominopelvic Quadrants

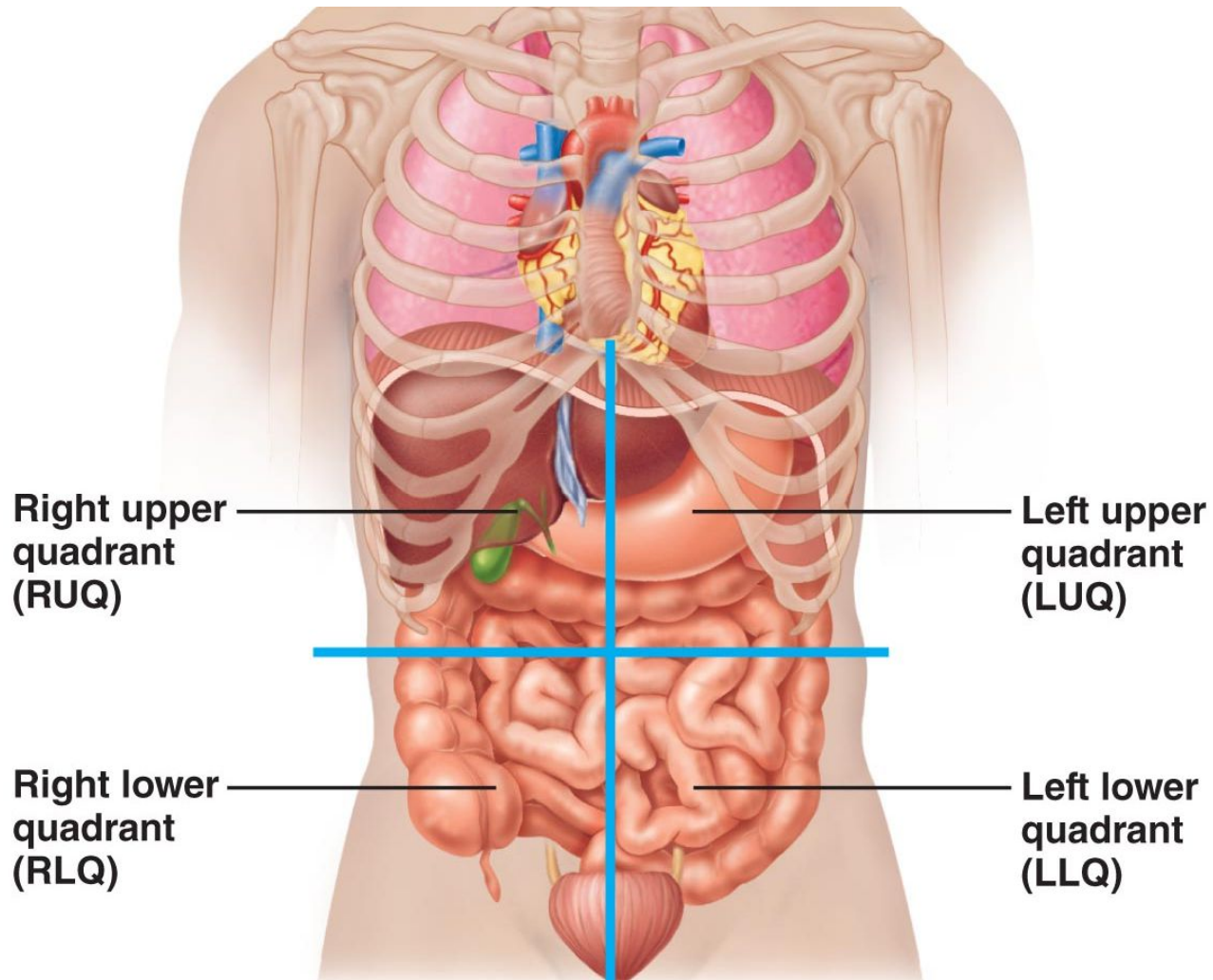
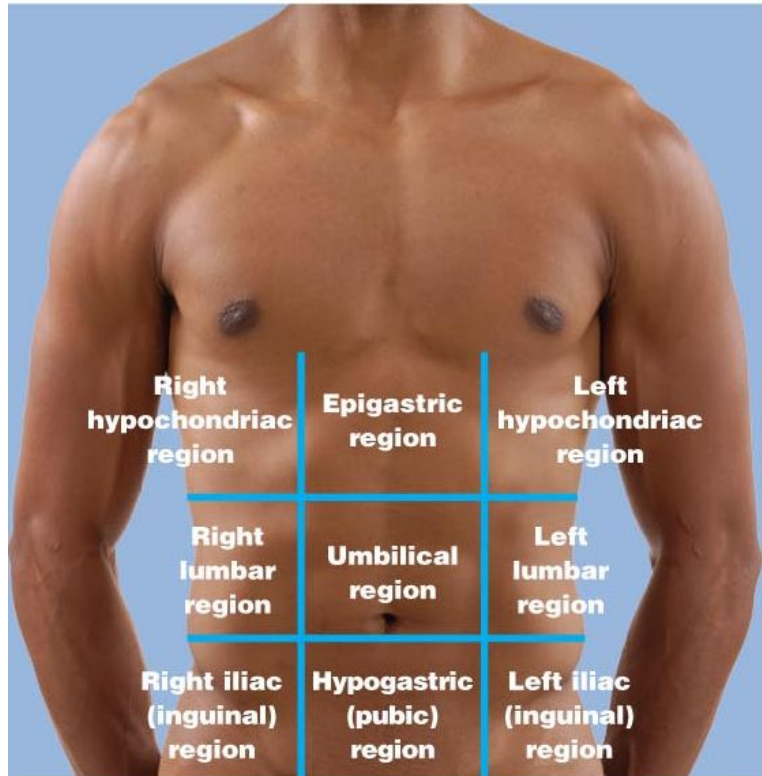
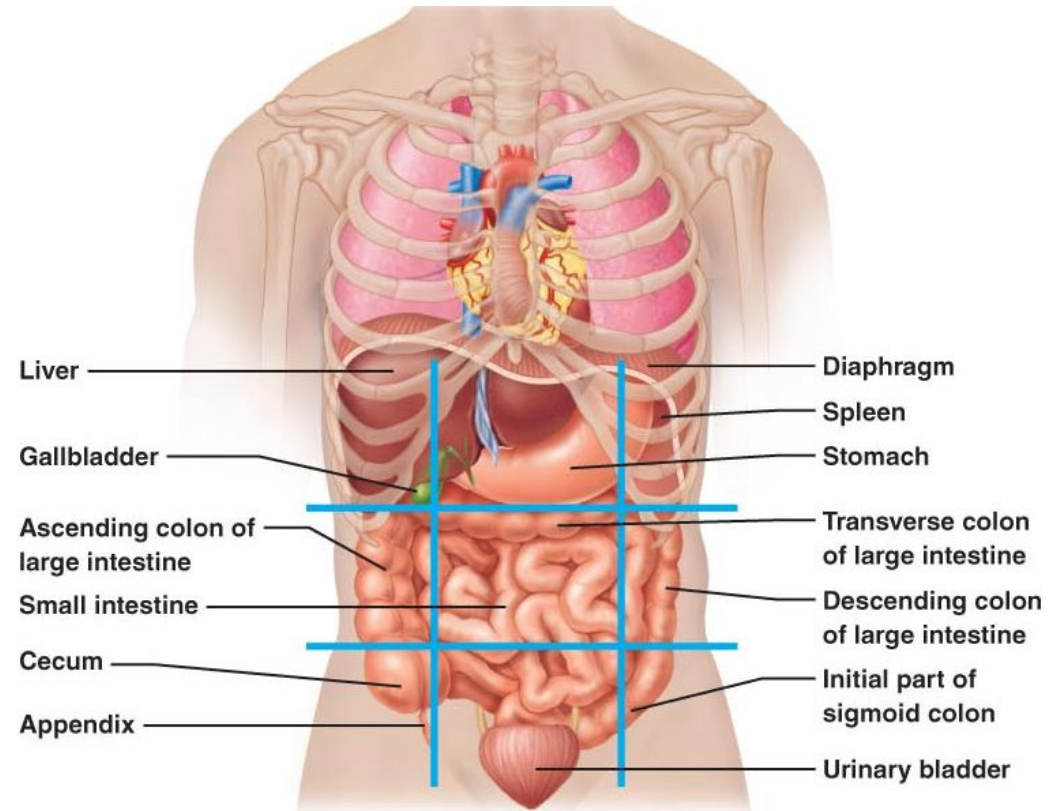


Fig. 1.11: Transverse and median planes intersect at the umbilicus

# Nine abdominopelvic regions



(a) Nine regions delineated by four planes



(b) Anterior view of the nine regions showing the superficial organ

Fig. 1.12: This division method is used primarily by anatomists