

## Chapter 1 Introduction to Human Anatomy and Physiology

<b>Anatomy:</b> A. Anatomy deals with the _____ (morphology) of the body and its _____.
<b>Physiology:</b> B. Physiology studies the _____ of these parts.
<b>Levels of Organization:</b> Atom → chemical → cell → tissue → organs → organ systems → organism
<b>Characteristics of Life</b> - Fundamental characteristics of life are traits shared by all organisms. Characteristics of life include: list 10 characteristics
Taken together, these 10 characteristics constitute metabolism
<b>Maintenance of Life</b> A. Requirements of Organisms 1. Life depends on the availability of the following: Water, Food, Oxygen, Heat, Pressure 2. Both the quality and quantity of these factors are important. B. Maintenance of a stable internal environment is called _____.
<b>Anatomical Terminology:</b>
<b>Anatomical position:</b> Terms of relative position are used to describe the location of a part relative to another part.
<u>Superior</u> : Needs to be in reference to another part. What does it mean?
<u>Inferior</u> : Opposite of superior, what does it mean?
<u>Anterior</u> : Means the same as ventral in humans. Where does it refer to?
<u>Posterior</u> : Means the same as dorsal in humans. What is it referring to?
<u>Medial</u> means towards the _____.
<u>Lateral</u> means towards the _____.
<u>Proximal</u> also is in reference to another part. It means _____ to the point of origin.

Distal is the opposite of proximal. It means \_\_\_\_\_ from the point of origin.

Superficial is \_\_\_\_\_ to the surface.

Deep is \_\_\_\_\_ from the surface.

**Body sections:**

Sagittal: A sagittal section divides the body into right and left portions.

Mid-sagittal:

Transverse (horizontal, cross-sectional): A transverse section divides the body into superior and inferior portions

Frontal (coronal): A coronal section divides the body into anterior and posterior sections.

**Body cavities:**

Dorsal cavity: cavity in the \_\_\_\_\_ of the body. Divided into the following:

Cranial cavity: contains the \_\_\_\_\_.

Spinal cavity: located inside the \_\_\_\_\_ & contains the \_\_\_\_\_.

Ventral cavity: located in the \_\_\_\_\_ of the body. Divided into the following:

Thoracic cavity: contains the \_\_\_\_\_ and \_\_\_\_\_ divided into the following:

Pleural cavities: contain the \_\_\_\_\_.

Pleural membrane: lines the pleural cavity.

Pericardial cavity: contains the \_\_\_\_\_.

Pericardium: lines the pericardial cavity.

Abdominopelvic cavity: abdominal cavity + pelvic cavity

Abdominal cavity: what does it contain?

Peritoneum: lines the abdominal cavity.

Mesentery: holds the \_\_\_\_\_ in place.

Pelvic cavity: What does it contain?

**Body systems:** List general organs and functions of the following systems.

Integumentary:

Skeletal:

Muscular:

Nervous:

Endocrine:

Digestive:

Respiratory:

Circulatory:

Lymphatic:

Urinary:

Reproductive: