## Anatomy & Physiology Unit 1 – Organization of the Human Body

(Chapter 1. The Human Body: An Orientation, pages 1 – 22)

## LEARNING TARGETS

**Bold** type indicates targets/sub-targets specific to grade weight IV ONLY. *Italics and red* indicate revisions to learning targets after a hard copy was distributed.

- 1. I can compare and contrast anatomy and physiology and the six levels of structural organization that make up the human body.
  - a. I can describe *anatomy* and *physiology* and explain how they are related (principle of complementarity of structure and function. (pages 2 & 3)
  - b. I can identify and/or list and provide examples of the six levels of structural organization (chemical, cellular, tissue, organ, organ system, and organism) and describe how each level of structural organization is related to the others. (pages 3 & 4 and Figure 1.1)
  - c. I can identify and/or list the 11 organ systems of the human body and list their major organs and describe their major functions. (Figure 1.3, pages 6 & 7)
- 2. I can explain homeostasis and discuss the roles of negative feedback and positive feedback in maintaining homeostasis.
  - a. I can define *homeostasis* and explain its importance. (page 8)
  - b. I can describe the basic components of homeostatic control systems and how they interact with each other: (stimulus), receptor, control center, (set point), and effector. (pages 9 & 10 and Figure 1.4, page 9)
  - c. I can describe negative feedback and describe a specific example of negative feedback in the body. (pages 9 & 10 and Figure 1.5; Calcium, 187 & 188 and Figure 6.12; Glucose, 618 620 and Figure 16.19; Temperature, 944 948 and Figure 24.26)
  - d. I can describe positive feedback and describe a specific example of positive feedback in the body. (pages 10 & 11 and Figure 1.6; Contractions during childbirth, 1085 1087; Blood clotting, 646 649)
  - e. I can compare and contrast negative and positive feedback mechanisms. (pages 9 11)
  - f. I can define *homeostatic imbalance*, describe its relationship to *disease*, and describe TWO sources of homeostatic imbalance. (page 11)
- 3. I can use anatomical terminology to name structures and to describe where they are located in relation to each other.
  - a. I can describe and demonstrate anatomical position. (pages 11 & 12 and Figure 1.7)
  - b. I can apply directional terms to descriptions of anatomical parts. (pages 11 13 and Table 1.1)
  - c. I can name, locate, and label the regions of the body. (page 13 and Figure 1.7)
  - d. I can name, locate, and label the planes of the body. (pages 14 & 15 and Figure 1.8)
  - e. I can name, locate, and label on a diagram the dorsal and ventral body cavities, their subdivisions, and the major organs contained within them. (pages 14 18 and Figure 1.9)
  - f. I can name, locate, and label on a diagram the serous membranes of the ventral body cavity and describe the common function of serous membranes.

    (pages 18 & 19 and Figure 1.10)

## **VOCABULARY**

physiology (p. 2) gross/macroscopic anatomy (p. 2) microscopic anatomy (p. 2) cytology (p. 2) histology (p. 2) developmental anatomy (p. 2) principle of complementarity of structure and function (p. 3) chemical level (of structural organization) (p. 3) cellular level (p. 3) organ level (p. 3) organ system level (p. 3) organsystem level (p. 3) integumentary system (p. 6) skeletal system (p. 6) muscular system (p. 6) lymphatic system/immunity (p. 7) respiratory system (p. 7) nervous system (p. 6) endocrine system (p. 6) endocrine system (p. 6) cardiovascular system (p. 6) cardiovascular system (p. 7) female reproductive system (p. 7) female reproductive system (p. 7) homeostasis (p. 8) variable (of homeostatic control system) (p. 9) stimulus (p. 9) afferent pathway (p. 9)	set point (p. 9) efferent pathway (p. 9) effector (p. 9) negative feedback mechanism (p. 10) homeostatic imbalance (p. 11) anatomical position (p. 11) superior (cranial) (p. 12) inferior (caudal) (p. 12) ventral (anterior) (p. 12) dorsal (posterior) (p. 12) medial (p. 12) lateral (p. 12) intermediate (p. 12) proximal (p. 12) superficial (external) (p. 12) deep (internal) (p. 12) axial part (of body) (p. 13) appendicular part (p. 13) cephalic (p. 13) frontal (p. 13) orbital (p. 13) nasal (p. 13) oral (p. 13) mental (p. 13) sternal (p. 13) sternal (p. 13) axillary (p. 13)	abdominal (p. 13) umbilical (p. 13) pelvic (p. 13) inguinal (p. 13) acromial (p. 13) brachial (p. 13) antecubital (p. 13) olecranal (p. 13) antebrachial (p. 13) carpal (p. 13) manus (p. 13) pollex (p. 13) metacarpal (p. 13) palmar (p. 13) digital (p. 13) coxal (p. 13) femoral (p. 13) patellar (p. 13) popliteal (p. 13) sural (p. 13) sural (p. 13) fibular (peroneal) (p. 13) pedal (p. 13) tarsal (p. 13) calcaneal (p. 13) metatarsal (p. 13) digital (p. 13) plantar hallux (p. 13) otic (p. 13) occipital (p. 13)	vertebral (p. 13) lumbar (p. 13) sacral (p. 13) gluteal (p. 13) perineal (p. 14) plane (p. 14) plane (p. 14) midsagittal plane (p. 14) midsagittal plane (p. 14) frontal (coronal) plane
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