

UNIT 1 – BODY PLAN AND ORGANIZATION

STANDARDS AND OBJECTIVES

STANDARD

01 Students will explore careers in health care and describe the body plan and organization and homeostasis.

OBJECTIVES

01.01 Students will explore careers in health care.

- **Students will participate in a minimum of four career exploration experiences to investigate a variety of health care careers related to therapeutic services, diagnostic services, health informatics, support services, and biomedical research and development pathways.**

01.02 Students will provide an oral and/or written report for each career exploration utilizing the report outline located in the MAP curriculum.

Note: Electronically delivered career exploration experiences are permissible.

01.03 Contrast the sciences of anatomy and physiology.

01.04 Describe the six levels of structural organization of the human body.
(chemical, cellular, tissue, organ, system, organism)

01.05 Describe metabolism and its anabolic and catabolic processes.

01.06 Apply directional terms used in human anatomy.
(posterior/anterior, medial/lateral, proximal/distal, superficial/deep, superior/inferior)

01.07 Apply commonly used planes to divide the body.
(sagittal, midsagittal, transverse [horizontal], frontal [coronal])

01.08 Identify the body cavities and locate the following organs within each cavity.

- Dorsal Cavity
 - Vertebral - spinal cord
 - Cranial - brain
- Ventral Cavity
 - Thoracic – heart, lungs
 - Mediastinum - heart, bronchi, esophagus, thymus
 - Pericardial - heart
 - Pleural - lungs
- Abdominopelvic Cavity - liver, spleen, intestines, kidneys, stomach
- Pelvic - intestines, urinary bladder, sex organs

01.09 Identify the major organ(s) in each abdominal quadrant.

- RUQ - right upper quadrant - liver, gallbladder, right kidney
- RLQ - right lower quadrant – cecum, appendix, right ovary
- LUQ - left upper quadrant - spleen, stomach, left kidney
- LLQ - left lower quadrant - left ovary

01.10 Examine the relationship between homeostasis and stress.

01.11 Differentiate between negative and positive feedback mechanisms.