

Human Anatomy and Physiology: Grades 9, 10, 11, 12

Adopted 2018

Patterns	HAP-LS1-1AR. Construct an explanation based on evidence obtained from a variety of sources for the pattern of hierarchical organization of each body system: <ul style="list-style-type: none">Integumentary SystemSkeletal SystemMuscular SystemRespiratory SystemCirculatory SystemDigestive SystemNervous SystemEndocrine SystemLymphatic SystemUrinary SystemReproductive Systems HAP-LS1-1AR
Structure and Function	HAP-LS2-1AR. Develop and use a model to identify and describe the relationship between the structures and physiological processes of each body system: <ul style="list-style-type: none">Integumentary SystemSkeletal SystemMuscular SystemRespiratory SystemCirculatory SystemDigestive SystemNervous SystemEndocrine SystemLymphatic SystemUrinary SystemReproductive Systems HAP-LS2-1AR
Scale, Proportion, and Quantity	HAP-LS3-1AR. Use mathematics and computational thinking to support explanations for physiological processes in body systems. HAP-LS3-1AR
Stability and Change	HAP-LS4-1AR. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. HAP-LS4-1AR
Cause and Effect	HAP-LS5-1AR. Argue from evidence the cause(s) for a dysfunction in a body system and the mechanisms by which it occurred. HAP-LS5-1AR
Energy and Matter	HAP-LS6-1AR. Construct and revise an explanation based on evidence for the cycling of matter and flow of energy among body systems and their associated processes. HAP-LS6-1AR
Systems and System Models	HAP-LS7-1AR. Develop and use a model to illustrate the interactions between systems that control or affect specific functions within the human body. HAP-LS7-1AR

Career Exploration with Engineering Practices

HAP-8-1AR. Obtain, evaluate, and communicate information related to health science professions. [HAP-8-1AR](#)

HAP-8-2AR. Design a solution to a complex real-world problem affecting body systems that can be solved through engineering. [HAP-8-2AR](#)

HAP-8-3AR. Evaluate a solution to a complex real-world human health problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts. [HAP-8-3AR](#)