

## Anatomy and Physiology

**INQUIRY****Scientific Inquiry****Process Skills**

- \_\_\_ Conduct experiments; collect, organize and analyze data to form conclusions. *Anat-01*
- \_\_\_ Graph and interpret the results of scientific investigations. *Anat-02*

**CONTENT****Life Science** (Power Standards to be integrated into each unit:)

- \_\_\_ Analyze the relationship between form and function within each body system. *Anat-03*
- \_\_\_ Explain the chemical processes and recognize patterns that are part of the physiology of each body system (e.g. firing of neurons, ion channels, muscle contractions). *Anat-04*
- \_\_\_ Recognize the importance of how each system helps to maintain homeostasis. *Anat-05*
- \_\_\_ Describe the structure and function of each body system from microscopic to macroscopic (molecular, cell organelles, cells, tissue, organs, organ systems). *Anat-06*
- \_\_\_ Describe the metabolic processes, including the chemical reactions involved, and how they are controlled in the organism. *Anat-07*
- \_\_\_ Compare and contrast types of tissues, both structurally and functionally. *Anat-08*

**CONNECTIONS****Science Practices**

- \_\_\_ Demonstrate safe and ethical lab procedures while working with organisms in the laboratory. *Anat-09*

**S/T/S (Science, Technology and Society)**

- \_\_\_ Analyze and describe applications of scientific and technological breakthroughs in medical/health research. *Anat-10*
- \_\_\_ Analyze the benefits and effects of health care issues (e.g., fetal tissue for Parkinson's disease, BGH for increased milk production, cardiovascular analysis). *Anat-11*
- \_\_\_ Identify careers requiring a background in anatomy and physiology. *Anat-12*