

Implementing District Standards

Standard: Understand important features of the process of scientific inquiry through science practices. Identify and investigate problems scientifically.

Students will:

- use standard safety practices for all classroom laboratory and field investigations
- record investigations clearly and accurately
- use scientific tools
- interpret data
- write clearly
- use proper units
- organize data into graphs, tables, and charts
- analyze scientific data via calculations
- use models
- asks quality questions
- use technology

Standard: Enhance reading, writing, and research in all curriculum areas.

Students will explore and develop real-life experiences and applications related to subject area content through case studies and research projects. Students will build vocabulary skills by demonstrating an understanding of contextual vocabulary and using content vocabulary in writing and speaking.

Standard: Analyze anatomical structures in relationship to their physiological functions.

Students will:

- investigate the interdependence of the various body systems to each other and to the body as a whole.
- explain the role of homeostasis and its mechanisms as these relate to the body as a whole and predict the consequences of the failure to maintain homeostasis.
- relate cellular metabolism and transport to homeostasis and cellular reproduction.
- describe how structure and function are related in terms of cell and tissue types.

Standard: Analyze the physical, chemical, and biological properties of process systems as these relate to transportation, absorption and excretion, including the cardiovascular, respiratory, digestive, excretory and immune systems.

Students will:

- describe the chemical and physical mechanisms of digestion, elimination, transportation, and absorption within the body to change food and derive energy.

- analyze, and explain the relationships between the respiratory and cardiovascular systems as they obtain oxygen needed for the oxidation of nutrients and removal of carbon dioxide.
- examine various conditions that change normal body functions (e.g. tissue rejection, allergies, injury, diseases and disorders) and how the body responds.
- describe the effects of aging and toxins on body systems.