

**Science: Grade 7**

**Scientific Inquiry**

- Develops research questions that can be answered through scientific investigations
- Accesses, evaluates and uses information from a variety of reliable sources
- Designs, conducts, and records scientific investigations following scientific inquiry
- Applies tools and techniques to collect, record, analyze, interpret and present data
- Develops logical descriptions, explanations, predictions, and models using evidence
- Recognizes and analyzes interpretations, conclusions, and predictions
- Communicates scientific procedures

**History and Nature of Science**

- Recognizes that scientists are from diverse backgrounds, but that all use scientific habits of mind
- Explains how scientists formulate and test their explanations, revising when necessary
- Investigates and identifies how scientists communicate their results and ideas
- Examines the effects between scientific innovation and human history

**Science in Personal and Social Perspectives**

- Demonstrates personal and group safety and resource conservation
- Thinks critically about risks and benefits of natural, chemical, biological, and personal hazards
- Explains environmental degradation on a global scale

**Science and Technology**

- Explains how societal challenges may impact scientific research
- Tests a design or invention and evaluates its effectiveness
- Compares the intended benefits and consequences of technology
- Describes how technology responds to societal needs

**Physical Science**

- Investigates how substances combine to form homogeneous mixtures
- Compares chemical and physical properties of matter and groups
- Investigates sequences of energy transformations in circuits
- Investigates the relationships among force, mass, and motion

**Life Science**

- Multi-cellular organisms including humans
- Assesses similarities and differences among internal structures in diverse organisms
- Analyzes mechanisms for disease at the cellular, tissue, organ, and system levels
- Explains the influence of genes and the environment on trait expression in organisms
- Describes growth processes

**Earth and Space Sciences**

- Recognizes how the movement of earth's lithospheric plates causes changes in earth's surface
- Analyzes the constructive and destructive forces that impact earth
- Compares and contrasts the motion, properties and characteristics of objects in the solar system

\*A DoDEA standards reference tool for teachers of grades PK-12. Complete standards for Science are listed at the DoDEA web site: <http://www.ododea.edu> (Standards & Curriculum-PK-12 Standards & Curriculum- Content Standards)