



Earth Odyssey Mission TEKS

Matter and Energy	
6.5A	Know that an element is a pure substance represented by chemical symbols
6.5B	Recognize that a limited number of the many known elements comprise the largest portion of solid Earth, living matter, oceans, and the atmosphere
6.5C	Differentiate between elements and compounds on the most basic level
6.6B	Calculate density to identify and unknown substance
7.5C	Diagram The flow of energy through living systems, including food chains, food webs, and energy pyramids.
7.6A	Identify that organic compounds contain carbon and other elements such as hydrogen, oxygen, phosphorus, nitrogen, or sulfur

Force, Motion, and Energy	
8.6C	Investigate and describe applications of Newton’s law of inertia, law of force and acceleration, and law of action-reaction such as in vehicle restraints, sports activities, amusement park rides, Earth’s tectonic activities, and rocket launches

Earth and Space	
8.5E	Investigate how evidence of chemical reactions indicate that new substances with different properties are formed
8.7A	Model an illustrate how the tilted Earth rotates on its axis, causing day and night, and revolves around the Sun causing changes in seasons
8.7B	Demonstrate and predict the sequence of events in the lunar cycle
8.8B	Recognize that the Sun is a medium-size star near the edge of a disc-shaped galaxy of stars and the Sun is many thousands of times closer to Earth than any other star.
8.9A	Describe the historical development of evidence that supports plate tectonic theory.
8.9B	Relate plate tectonics to the formation of crustal features
8.9C	Interpret topographic maps and satellite views to identify land and erosional features and predict how these features may be reshaped by weathering.
8.10A	Recognize that the Sun provides the energy that drives convection within the atmosphere and oceans, producing winds and ocean currents
8.10B	Identify how global patterns of atmospheric movement influence local weather using weather maps that show high and low pressure and fronts
8.10C	Identify the role of the oceans in the formation of weather systems such as hurricanes
6.11A	Describe the physical properties, locations, and movements of the Sun, planets, Galilean moons, meteors, asteroids, and comets
6.11B	Understand that gravity is the force that governs the motion of our solar system
6.11C	Describe the history and future of space exploration, including the types of equipment and transportation needed for space travel

Organisms and Environments	
6.12E	Describe Biotic and abiotic parts of an ecosystem in which organisms interact
8.11B	Investigate how organisms and populations in an ecosystem depend on and may compete for biotic and abiotic factors such as quantity of light, water, range of temperatures, or soil composition
8.11C	Explore how short and long term environment changes affect organisms and traits in subsequent populations
8.11D	Recognize human dependence on ocean systems and explain how human activities such as runoff, artificial reefs, and use of resources have modified these systems
7.10B	Describe how biodiversity contributes to the sustainability of an ecosystem
Process Skills	
6.1B	Practice appropriate use and conservation of resources, including disposal, reuse, or recycling of materials
6.1A 7.1A 8.1A	Demonstrate safe practices during laboratory and field investigations as outlined in the Texas Safety Standards
6.1B 7.1B 8.1B	Practice appropriate use and conservation of resources, including disposal, reuse, or recycling of materials
6.2B 7.2B 8.2B	Design and implement experimental investigations by making observations, asking well-defined questions, formulating testable hypotheses and using appropriate equipment and technology
6.2C 7.2C 8.2C	Collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers
6.2E 7.2E 8.2E	Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends
6.3A 7.3A 8.3A	In all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student
6.3B 7.3B 8.3B	Use models to represent aspects of the natural world such as an atom, a molecule, space, or a geologic feature
6.3C 7.3C 8.3C	Identify advantages and limitations of models such as size, scale, properties, and materials
6.3D 7.3D 8.3D	Relate the impact of research on scientific thought and society, including the history of science and contributions of scientist as related to the content.