

## Sixth Grade Unifying Concepts and TEKS Correlation

Systems	Properties, Patterns, and Models	Consistency and Change
<b>6.5 – The student knows that systems may combine with other systems to form a larger system.</b>	<b>6.7 – The student knows that substances have physical and chemical properties.</b>	<b>6.6 – The student knows that there is a relationship between force and motion.</b>
<p>6.5A- Identify and describe a system that results from the combination of two or more systems such as in the solar system.</p> <p>6.5B – Describe how the properties of a system are different from the properties of its parts.</p>	<p>6.7A – Demonstrate that new substances can be made when two or more substances are chemically combined and compare the properties of the new substances to the original substances.</p> <p>6.7B – Classify substances by their physical and chemical properties.</p>	<p>6.6A – Identify and describe the changes in position, direction of motion, and speed of an object when acted upon by force.</p> <p>6.6B – Demonstrate that changes in motion can be measured and graphically represented.</p> <p>6.6C – Identify forces that shape features of the Earth including uplifting, movement of water, and volcanic activity.</p>
<b>6.8 – The student knows that complex interactions occur between matter and energy.</b>	<b>6.10 – The student knows the relationship between structure and function in living systems.</b>	<b>6.11 – The student knows that traits of species can change through generations and that the instructions for traits are contained in the genetic material of the organisms.</b>
<p>6.8A – Define matter and energy.</p> <p>6.8B – Explain and illustrate the interactions between matter and energy in the water cycle and in the decay of biomass such as a compost bin.</p> <p>6.8C – Describe energy flow in living systems including food chains and food webs.</p>	<p>6.10A – Differentiate between structure and function in living systems.</p> <p>6.10B – Determine that all organisms are composed of cells that carry on functions to sustain life.</p> <p>6.10C – Identify how structure complements function at different levels of organization including organs, organ systems, organisms, and populations.</p>	<p>6.11A – Identify some changes in traits that can occur over several generations through natural occurrence and selective breeding.</p> <p>6.11B – Identify cells as structures containing genetic material.</p> <p>6.11C – Interpret the role of genes in inheritance.</p>
<b>6.9 – The student knows that obtaining, transforming, and distributing energy affects the environment.</b>	<b>6.12 – The student knows that the responses of organisms are caused by internal or external stimuli.</b>	
<p>6.9A – Identify energy transformations occurring during the production of energy for human use such as electrical energy to heat energy or heat energy to electrical energy.</p> <p>6.9B – Compare methods used for transforming energy in devices such as water heaters, cooling systems, or hydroelectric and wind power plants.</p> <p>6.9C – Research and describe energy types from their source to their use and determine if the type is renewable, non-renewable, or inexhaustible.</p>	<p>6.12A – Identify responses in organisms to internal stimuli such as hunger or thirst.</p> <p>6.12B – Identify responses in organisms to external stimuli such as presence or absence of heat or light.</p> <p>6.12C – Identify components of an ecosystem to which organisms may respond.</p>	
	<b>6.13 – The student knows components of our solar system.</b>	
	<p>6.13A – Identify characteristics of objects in our solar system including the sun, planets, meteorites, comets, asteroids, and moons.</p> <p>6.13B – Describe types of equipment and transportation needed for space travel.</p>	
	<b>6.14 – The student knows the structure and functions of Earth systems.</b>	
	<p>6.14A – Summarize the rock cycle.</p> <p>6.14B – Identify relationships between groundwater and surface water in a watershed.</p> <p>6.14C – Describe components of the atmosphere, including oxygen, nitrogen, and water vapor, and identify the role of atmospheric movement in weather change.</p>	