

Systems	Properties, Patterns, and Models	Consistency and Change
<b>8.6 – The student knows that interdependence occurs among living systems.</b>	<b>8.8 – The student knows that matter is composed of atoms.</b>	<b>8.7 – The student knows that there is a relationship between force and motion.</b>
<p>8.6A – Describe interactions among systems in the human organism.</p> <p>8.6B – Identify feedback mechanisms that maintain equilibrium of systems such as body, temperature, turgor pressure, and chemical reactions.</p> <p>8.6C – Describe interactions within ecosystems.</p>	<p>8.8A – Describe the structure and parts of an atom.</p> <p>8.8B – Identify the properties of an atom including mass and electrical charge.</p>	<p>8.7A – Demonstrate how unbalanced forces cause changes in speed or direction of an object's motion.</p> <p>8.7B – Recognize that waves are generated and can travel through different media.</p>
<b>8.10 – The student knows that complex interactions occur between matter and energy.</b>	<b>8.9 – The student knows that substances have chemical and physical properties.</b>	<b>8.11 – 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>8.10A – Illustrate interactions between matter and energy.</p> <p>8.10B – Describe interactions among solar energy, weather, and ocean systems.</p> <p>8.10C – Identify and demonstrate that loss or gain of heat energy occurs during exothermic and endothermic chemical reactions.</p>	<p>8.9A – Demonstrate that substances may react chemically to form new substances.</p> <p>8.9B – Interpret information on the periodic table to understand that physical properties are used to group elements.</p> <p>8.9C – Recognize the importance of formulas and equations to express what happens in a chemical reaction.</p> <p>8.9D – Identify that physical and chemical properties influence the development and application of everyday materials such as cooking surfaces, insulation, adhesives, and plastics.</p>	<p>8.11A – Identify that change in the environmental conditions can affect the survival of individuals and of species.</p> <p>8.11B – Distinguish between inherited traits and other characteristics that result from interactions with the environment.</p> <p>8.11C – Make predictions about possible outcomes of various genetic combinations of inherited characteristics.</p>
	<b>8.12 – The student knows that cycles exist in Earth systems.</b>	
	<p>8.12A – Analyze and predict the sequence of events in the lunar and rock cycles.</p> <p>8.12B – Relate the role of oceans to climactic changes.</p> <p>8.12C – Predict the results of modifying the Earth's nitrogen, water, and carbon cycles.</p>	
	<b>8.13 – The student knows characteristics of the universe.</b>	
	<p>8.13A – Describe characteristics of the universe such as stars and galaxies.</p> <p>8.13B – Explain the use of light years to describe the distances of the universe.</p> <p>8.13C – Research and describe historical scientific theories of the origin of the universe.</p>	
	<b>8.14 – The student knows that natural events and human activities can alter Earth systems.</b>	
	<p>8.14A – Predict land features resulting from gradual changes such as mountain building, beach erosion, land subsidence, and continental drift.</p> <p>8.14B – Analyze how natural or human events may have contributed to the extinction of some species.</p> <p>8.14C – Describe how human activities have modified soil, water, and air quality.</p>	