

## GRADE 7 SCIENCE CURRICULUM MAP 2008-2009

September	October	November	December	January
<p><b>P.EN.06.11</b> Identify kinetic or potential energy in everyday situations</p> <p><b>P.EN.06.12</b> Demonstrate the transformation between potential and kinetic energy in simple mechanical systems</p> <p><b>P.EN.07.31</b> Identify examples of waves, including sound waves, seismic waves, and waves on water.</p> <p><b>P.EN.07.32</b> Describe how waves are produced by vibrations in matter.</p> <p><b>P.EN.07.33</b> Demonstrate how waves transfer energy when they interact with matter.</p> <p><b>P.EN.07.43</b> Explain how light energy is transferred to chemical energy through the process of photosynthesis.</p> <p><b>P.EN.06.41</b> Explain how different forms of energy can be transferred from one place to another by radiation, conduction, or convection.</p>	<p><b>P.EN.06.42</b> Illustrate how energy can be transferred while no energy is lost or gained in the transfer.</p> <p><b>P.EN.07.61</b> Identify that nuclear reactions take place in the sun, producing heat and light.</p> <p><b>P.EN.07.62</b> Explain how only a tiny fraction of light energy from the sun is transformed to heat energy on Earth.</p> <p><b>P.CM.07.21</b> Identify evidence of chemical change through color, gas formation, solid formation, and temperature change.</p> <p><b>P.PM.07.11</b> Classify substances by their chemical properties (flammability, pH, acid-base indicators, reactivity).</p>	<p><b>P.PM.07.22</b> Describe how the elements within the Periodic Table are organized by similar properties into families</p> <p><b>P.PM.07.22</b> Describe how the elements within the Periodic Table are organized by similar properties into families</p> <p><b>P.CM.07.22</b> Compare and contrast the chemical properties of a new substance with the original after a chemical change.</p> <p><b>P.CM.07.23</b> Describe the physical properties and chemical properties of the products and reactants in a chemical change.</p>	<p><b>Continue from November</b></p>	<p><b>L.OL.07.21</b> Recognize that all organisms are composed of cells (single cell organisms, multicellular organisms).</p> <p><b>L.OL.07.22</b> Explain how cells make up different body tissues, organs, and organ systems.</p> <p><b>L.OL.07.23</b> Describe how cells in all multicellular organisms are specialized to take in nutrients, which they use to provide energy for the work that cells do and to make the materials that a cell or organism needs.</p> <p><b>L.OL.07.24</b> Recognize that cells function in a similar way in all organisms.</p> <p><b>L.OL.07.31</b> Describe growth and development in terms of increase of cell number and/or cell size.</p> <p><b>L.OL.07.32</b> Examine how through cell division, cells can become specialized for specific functions.</p>

February	March	April	May	June
<p><b>L.OL.07.61</b> Recognize the need for light to provide energy for the production of carbohydrates, proteins and fats.</p> <p><b>L.OL.07.62</b> Explain that carbon dioxide and water are used to produce carbohydrates, proteins, and fats.</p> <p><b>L.OL.07.63</b> Describe evidence that plants make, use and store food.</p>	<p><b>L.HE.05.11</b> Explain that the traits of an individual are influenced by both the environment and the genetics of the individual.</p> <p><b>L.HE.05.12</b> Distinguish between inherited and acquired traits.</p> <p><b>L.HE.07.21</b> Compare how characteristics of living things are passed on through generations, both asexually and sexually.</p>	<p><b>L.HE.07.22</b> Compare and contrast the advantages and disadvantages of sexual vs. asexual reproduction.</p> <p><b>L.OL.06.51</b> Classify organisms (producers, consumers, and decomposers) based on their source of energy for growth and development.</p> <p><b>L.OL.06.52</b> Distinguish between the ways in which consumers and decomposers obtain energy.</p> <p><b>L.EC.06.11</b> List examples of populations, communities, and ecosystems including the Great Lakes region.</p>	<p><b>L.EC.06.21</b> Describe common patterns of relationships between and among populations (competition, parasitism, symbiosis, predator/prey).</p> <p><b>L.EC.06.22</b> Explain how two populations of organisms can be mutually beneficial and how that can lead to interdependency.</p> <p><b>L.EC.06.23</b> Predict how changes in one population might affect other populations based upon their relationships in the food web.</p> <p><b>L.EC.06.31</b> Identify the living (biotic) and nonliving (abiotic) components of an ecosystem.</p> <p><b>L.EC.06.32</b> Identify the factors in an ecosystem that influence changes in population size.</p>	<p><b>Continue from May</b></p>