

<b>COURSE CODE:</b> 2003350		<b>COURSE NAME:</b> <i>Honors Chemistry</i>	
<b>UNIT TITLE:</b> PERIODICITY		<b>UNIT ESSENTIAL QUESTION:</b>	
<b>SEMESTER:</b> 1	<b>Grading Period:</b> 2	<p>How does the periodic table predict the properties and behavior of elements?</p>	
<b>CONCEPT</b>		<b>CONCEPT</b>	
<p style="text-align: center;"><b><u>Periodic Law</u></b></p> <p>Recognize the organizing principles for the periodic table. Identify members (elements) of a family according to their chemical and physical properties.</p>		<p style="text-align: center;"><b><u>Periodic Trends</u></b></p> <p>Describe periodic trends (ionization energy, atomic radius, electron affinity) as they relate to electron configuration. Suggested Extended Thinking Strategy: Deductive Reasoning</p>	
<b>STANDARD(S)</b>		<b>STANDARD(S)</b>	
<a href="#"><u>SC.912.P.8.5</u></a>		<a href="#"><u>SC.912.P.8.5</u></a>	
<b>LESSON ESSENTIAL QUESTION</b>		<b>LESSON ESSENTIAL QUESTION</b>	
<p>How was the periodic table first developed and what changes to the periodic table have occurred over time?</p> <p>What can we learn about an element based on its position in the periodic table?</p> <p>How does electron configuration relate to periodic properties and the groups of the periodic table?</p>		<p>How do periodic trends relate to the electron structure of an element?</p> <p>What is the relationship between atomic radius, ionization energy and electron affinity?</p>	

VOCABULARY	VOCABULARY	VOCABULARY
<p><a href="#">Periodic table</a>, <a href="#">periodic law</a>, <a href="#">alkali metals</a>, <a href="#">alkaline earth metals</a>, <a href="#">halogens</a>, <a href="#">chalcogens</a>, <a href="#">lanthanide/actinide series</a>, <a href="#">metalloids</a>, <a href="#">noble gases</a>, <a href="#">transition metals</a>, <a href="#">period</a>, <a href="#">Mendeleev</a>, <a href="#">Moseley</a>, <a href="#">periodic groups</a></p>	<p><a href="#">atomic radius</a>, <a href="#">effective nuclear charge</a>, <a href="#">electron affinity</a>, <a href="#">ionization energy</a>, <a href="#">electronegativity</a>, <a href="#">periodic law</a>, <a href="#">periodic trends</a></p>	
<b>RESOURCES</b>		
<p>Periodic Table worksheets and activities: <a href="http://www.nclark.net/PeriodicTable.html">http://www.nclark.net/PeriodicTable.html</a>            Element Brochure: <a href="http://www.nclark.net/ElementBrochure.html">http://www.nclark.net/ElementBrochure.html</a>            Periodic Table trends: <a href="http://www.teachersdomain.org/resource/Isps07.sci.phys.matter.graphperiodic/">http://www.teachersdomain.org/resource/Isps07.sci.phys.matter.graphperiodic/</a>  <a href="#">Alien Periodic Table Activity</a>  <a href="#">Element Project</a>  <a href="#">Periodic Trends Straw Lab</a>            See Invitations to Science Inquiry Book for additional resources and lab suggestions.            Smart board presentations            GIZMO</p>		
<b>ADDITIONAL INFORMATION</b>		
<p>Mendeleev Lab: <a href="http://www.nclark.net/MendeleevLab.htm">http://www.nclark.net/MendeleevLab.htm</a>            Pearson Chemistry Textbook program and ancillary materials and resource attachments, the Internet, Unitedstreaming, Khan Academy, and classroom models, downloaded educational videos.            Discovery Education            Khan Academy            You tube videos</p>		