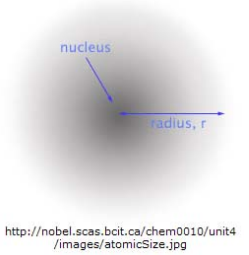
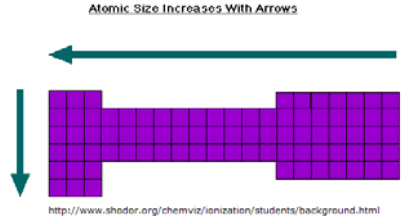
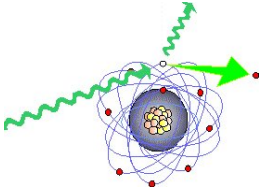
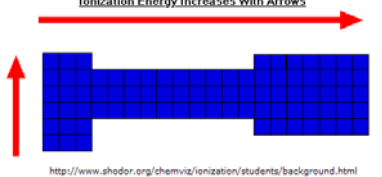
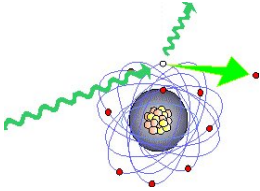
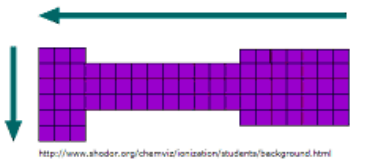

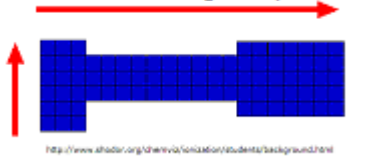


Periodic Property		Change	n	Z*	Trend across the Periodic Table
			last electronic level	number of protons "felt" by the outer electrons	
<b>SIZE</b>	 <p>The volume occupied by an atom</p> <p><a href="http://nobel.scas.bcit.ca/chem0010/unit4/images/atomicSize.jpg">http://nobel.scas.bcit.ca/chem0010/unit4/images/atomicSize.jpg</a></p>	...increases when...	<b>n ↑</b>	<b>Z* ↓</b>	<p>Atomic Size Increases With Arrows</p>  <p><a href="http://www.shodor.org/chemviz/ionization/students/background.html">http://www.shodor.org/chemviz/ionization/students/background.html</a></p>
<p>there are more electronic levels (the outer electrons are farther from the nucleus)</p> <p>there are less protons "felt" by the outer electrons</p>			<p>there are less electronic levels (the outer electrons are closer from the nucleus)</p> <p>there are more protons "felt" by the outer electrons</p>		
<b>IONIZATION ENERGY (IE)</b>	 <p>The amount of energy needed to extract an electron from an atom / ion</p> $A \xrightarrow[\text{energy}]{\text{ionization}} A^+ + 1 e^-$	...increases when...	<b>n ↓</b>	<b>Z* ↑</b>	<p>Ionization Energy Increases With Arrows</p>  <p><a href="http://www.shodor.org/chemviz/ionization/students/background.html">http://www.shodor.org/chemviz/ionization/students/background.html</a></p>
<p>there are less electronic levels (the outer electrons are closer from the nucleus)</p> <p>there are more protons "felt" by the outer electrons</p>			<p>there are more electronic levels (the outer electrons are farther from the nucleus)</p> <p>there are less protons "felt" by the outer electrons</p>		
<b>METALLIC BEHAVIOR</b>	 <p>The tendency an atom has to lose electrons (qualitative property)</p>	...increases when...	<b>n ↑</b>	<b>Z* ↓</b>	<p>Metallic behavior</p>  <p><a href="http://www.shodor.org/chemviz/ionization/students/background.html">http://www.shodor.org/chemviz/ionization/students/background.html</a></p>
<p>there are more electronic levels (the outer electrons are farther from the nucleus)</p> <p>there are less protons "felt" by the outer electrons</p>			<p>there are less electronic levels (the outer electrons are closer from the nucleus)</p> <p>there are more protons "felt" by the outer electrons</p>		
<b>ELECTRONEGATIVITY (en)</b>	<p>In this case:</p>  <p>en (A) &gt; en (B)</p> <p>The ability of an atom (in a molecule) to attract electrons to itself.</p>	...increases when...	<b>n ↓</b>	<b>Z* ↑</b>	<p>electronegativity</p>  <p><a href="http://www.shodor.org/chemviz/ionization/students/background.html">http://www.shodor.org/chemviz/ionization/students/background.html</a></p>
<p>there are less electronic levels (the outer electrons are closer from the nucleus)</p> <p>there are more protons "felt" by the outer electrons</p>			<p>there are more electronic levels (the outer electrons are farther from the nucleus)</p> <p>there are less protons "felt" by the outer electrons</p>		

