

# Chemistry Lesson Plan

<b>Topic</b>	Structure and Properties of Matter
<b>Lesson Title</b>	Electron Configuration
<b>Lesson Number</b>	1-6d
<b>Next Generation Science Standards:</b>	<p><b>HS-PS1-1.</b> Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.</p> <p><b>HS-PS1-2.</b> Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.</p>
<b>Learning objectives:</b>	<ul style="list-style-type: none"> <li>• Decode orbital notation</li> <li>• Identify elements based on orbital notation</li> </ul>
<b>“I can” statement:</b>	<ul style="list-style-type: none"> <li>• I can give the notation for elements and use notation to identify an element.</li> </ul>
<b>Prior Knowledge:</b>	
<ul style="list-style-type: none"> <li>• Pauli Exclusion Principle</li> <li>• Aufbau Principle</li> <li>• S,p,d,f orbitals</li> <li>• Hund’s Rule</li> </ul>	
<b>Vocabulary:</b>	
Atomic number, electron configuration, energy level, valence electron, Aufbau Principle, Pauli Exclusion Principle, s-orbital, p-orbital, d-orbital, f-orbital, Hund’s Rule, Electron orbital diagram, sub-level, orbital notation	
<b>Summary of Activities:</b>	
<ol style="list-style-type: none"> <li>1. Distribute and complete bell ringer activity.</li> <li>2. Discuss guided notes and slideshow, with students.</li> <li>3. Complete the Vocabulary worksheet and/or doodle notes activity,</li> <li>4. Exit quiz</li> </ol>	
<b>Additional Resources:</b>	
<b>YouTube clips on:</b>	
<ul style="list-style-type: none"> <li>• Assigning electrons to sub-shells</li> <li>• Electron orbitals</li> </ul>	
<b>Homework:</b>	
Homework task	
<b>Assessment:</b>	
<ul style="list-style-type: none"> <li>• Bell work</li> </ul>	

- Exit quiz
- End of unit review