Class: Chemistry
Unit: Chapter 5: Periodic Law
Target: 05-02 Use the Periodic Law to predict the properties of elements. (Chapter 1:3, Chemical Handbook, Chapter 5 Periodic Law)

Score	Description	Student Score
Exceeds Target (Exemplary) ● Deeper more rigorous thinking ● Application to real world use, teach another person, use information to solve problems in a different context, explain connections between ideas, demonstrate a unique insight and/or creative application of skills.	Research Dimitris Mendeleev's work on predicting the presence of three unknown elements. Discuss the Periodic Table properties that he used to defend his predictions. Compare and contrast the properties of the discovered elements to his predictions.	
Mastery of Target (Application) Can apply target to new information.		
Proficient in Target ● Expected level of performance for all students ● Consistent and Independent	Use the Periodic Law to predict the properties of elements. **Indicators**: Apply Periodic Law to Electron Configuration Apply Periodic Law to Atomic and Ionic Size Apply Periodic Law to Electron Affinity Apply Periodic Law to Electronegativity Apply Periodic Law to Ionization Energy	
Approaching Proficiency ● Basic learning necessary for foundation of target. ● Recall questions, fact-based skills, basic applications ● Independent, not consistent	(U01) Use the Periodic Table to predict ion charge of main group elements. (U01) Predict physical properties including color, phase at room temperature, malleability, conductivity, and ductility. (U01) Classify elements as metals, nonmetals, and metalloids using the Periodic Table. (U01) Define period, group, family, Lanthanides and Actinides. (U01) Know how the periods, groups, and families are indicated on the Periodic Table.	
Needs Development ● With help, can demonstrate some understanding of target		
No Evidence to Measure		

I can use the Periodic Table to determine electron configuration.
I can use the Periodic Table to predict the relative size of an atom.
I can use the Periodic Table to predict the relative size of an ion.
I can use the Periodic Table to predict relative electron affinity.
I can use the Periodic Table to predict relative electronegativity.
I can use the Periodic Table to predict relative ionization energy.